

**SOLVENCY MODERNIZATION
INITIATIVE:
A REGULATOR'S PERSPECTIVE**

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CAS Loss Reserve Seminar
September 20, 2010

SMI- A Regulator's Perspective

- Capital Requirements:
 - RBC Overhaul
 - Regulatory Capital vs. Economic Capital
 - Use of Modeling
- Impact of Accounting Changes

2

SMI- A Regulator's Perspective

- Capital Requirements:
 - RBC is in need of overhaul
 - Needs to be calibrated- what is implied probability of ruin?
 - Missing risks need to be considered- esp. property catastrophe risk
 - Parameterization could stand to be reexamined
 - Is it too simple? E.g. should single-state concentrations be adjusted for?

3

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- Capital Requirements (cont.):
 - RBC's advantages:
 - Simple
 - consistently applied
 - based on publicly available information
 - Easy to duplicate
 - difficult to manipulate
 - Recognizes most key risk factors

4

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- Regulatory Capital vs. Target Capital
 - Regulatory Capital: the capital level (i.e. RBC Company Action Level) at which the Insurance Commissioner has the legal authority to intervene to require the insurance company to take action to strengthen its capital.
 - Target Capital: the "optimum" capital level for an insurer to operate as a well-capitalized going concern for the long term
 - Balances the insurer's need for protection against adverse events with its need to be appropriately leveraged to provide a rate of return sufficient to cover its cost of capital

5

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- Regulatory Capital vs. Target Capital (cont.)
 - State insurance regulators have historically been concerned with regulatory capital for solvency regulation
 - RBC was designed strictly as a regulatory capital requirement
 - To a lesser extent, "target" or "economic" capital has been a consideration for rate regulatory purposes- but indirectly
 - The NAIC has never attempted to determine "target" or "economic capital"
 - RBC has been confused (misused?) in a rate regulatory environment
 - CASTF has issued "Regulatory Guidance on the Misuse of RBC in Ratemaking"
 - (August 2008)
 - (on CASTF page of NAIC website)

6

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- Regulatory Capital vs. Target Capital (cont.)
 - Focusing entirely on Regulatory Capital level (RBC Company Action Level) in solvency assessments has its limitations
 - Regulator can see percentage relationship of company's policyholders' surplus to RBC Authorized Control Level (published in Annual Statement) and thus to Company Action Level (which is twice AC level)
 - Regulator isn't really able to tell how adequate this level is- what level of protection it provides

7

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- Regulatory Capital vs. Target Capital (cont.)
 - There is a need for something more-something that provides some measure of the value of the cushion of PHS above RBC Company Action Level
 - Most insolvencies don't happen overnight: they emerge over several years;
 - changes in capital position from year to year indicate which direction the company is going
 - Company's status can change suddenly from looking questionable to being insolvent due to "management" of the financials
 - Need to know if a company with PHS above CA Level is marginal or well-capitalized

8

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- Regulatory Capital vs. Target Capital (cont.)
 - Rating agencies (e.g. A.M. Bests) issue financial strength ratings
 - These drive insurer capital levels much more than does RBC
 - This is as it should be-
 - since "target capital"- the "optimum" level of capitalization- should be based in part on perceived financial strength;
 - RBC is simply a minimum level below which the regulator is concerned about the insurer's ability to meet its obligations
 - Ratings- if regulators can believe them- do provide a "scale" of financial strength or lack thereof
 - A "target capital" calculation would provide another point of reference that (together with "regulatory capital" requirement) would define a simple "scale"

9

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- Regulatory Capital vs. Target Capital (cont.)
 - A hypothetical construct:
 - My personal opinion; for discussion purposes only
 - “Blue sky” consideration given that RBC is being reexamined
 - Could RBC regulatory intervention levels be set at specified probabilities of ruin, and could there be increasing levels of financial strength defined at decreasing probabilities of ruin (i.e. increasingly strictly defined levels of protection)?

10

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- Regulatory Capital vs. Target Capital (cont.)
 - Hypothetical construct (cont.):
 - Pros-
 - would provide a well-defined measuring tool of the continuum of financial strength- and thus degree of policyholder protection
 - Would be within the control of regulators if determined within the RBC process
 - Cons-
 - Can we specify the distributions (and thus determine the probabilities of ruin) with any degree of accuracy?
 - Does the NAIC want to be (in effect) in the rating agency business?
 - If public, would this information be misleading and/or misused?

11

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- Regulatory Capital vs. Target Capital (cont.)
 - Hypothetical construct (cont.):
 - Possible alternatives:
 - Keep the scale confidential for use by regulators only
 - Make more systematic use of rating agency ratings
 - Determine a “target capital” level
 - Require companies to complete and share with Commissioner an “Own Risk and Solvency Assessment” that provides the company’s modeling and assessment of its position on a continuum- with the opportunity for the Commissioner to require modeling of alternative assumptions
 - My personal opinion- this construct is useful if only as a frame of reference as RBC is reexamined

12

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- Use of Modeling
 - Agree that use of modeling for determination of regulatory capital requirements should be approached with extreme care
 - Actuarial reserve opinions as a cautionary example:
 - I personally don't trust them; have to read report
 - We see aggressively optimistic assumptions in Actuarial Reports with some frequency
 - Makes us wonder if they are intended to justify a desired (preconceived) result
 - CA WC example- 20+ companies insolvent in early 2000's
 - All had "clean" (reasonable) opinions for all 3 years prior to insolvency
 - Reserve inadequacy the proximate cause of insolvency in all but one case

13

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- Use of Modeling (cont.)
 - Allowing companies to determine their own capital requirements based on their own internal models would seem to be taking too much on faith and would seem to invite abuse; too much is at stake in this area
 - Insurance departments would have to staff up dramatically to do the work to validate the company models
 - high-quality (expensive!) resources needed
 - Each evaluation would be very involved and time-consuming
 - Is this cost-effective- or even possible?

14

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- Use of Modeling (cont.)
 - Situations where modeling could be useful (or necessary): risks that are significant and are not adequately dealt with by the existing formula-type approach
 - Property catastrophe risk is the prime example
 - Most obvious risk not covered by existing RBC formula
 - Commercial models exist, have gotten better; they are the only tool that comes remotely close to adequately measuring the risk

15

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- Use of Modeling (cont.)
 - Property Catastrophe Risk
 - NAIC is developing a modeling approach to including a charge for property catastrophe risk in the RBC formula
 - I chair the Cat Risk Subgroup of the P&C RBC Working Group (of the Capital Adequacy Task Force)
 - Limited to earthquake and hurricane risk initially
 - Progress has been slow
 - Key issues:
 - Which models to use
 - Which modeling assumptions to use
 - How to validate data- completeness and accuracy
 - How to deal with reinsurance

16

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- Impact of Accounting Changes
 - International accounting standards appear headed towards discounting of all liabilities with a risk margin
 - Assuming GAAP converts to IAS, and SAP follows, P&C reserves would be discounted
 - Impacts to state solvency regulation could be profound

17

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- Impact of Accounting Changes (cont.)
 - Impacts to state solvency regulation:
 - Depending on size of risk margin, the "cushion" implicit in the present value of future investment income on assets backing loss and LAE reserves could shrink dramatically
 - RBC would have to be recalibrated accordingly
 - If "cushion" not restored through higher RBC capital requirements: solvency regulation would need to be more assertive:
 - More critical attention will be paid to actuarial opinions and reports (challenging assumptions and conclusions)
 - solvency regulators would be more likely to intervene more quickly and more often

18

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- Questions and/or comments?

19
