

# The Financial Reporter

*The Newsletter of the Life Insurance Company Financial Reporting Section*

## AICPA Releases SOP 05-1

### Accounting by Insurance Enterprises for Deferred Acquisition Costs in Connection With Modifications or Exchanges of Insurance Contracts

*by John W. Morris*

#### AICPA Releases SOP 05-1

In September 2005, the American Institute of Certified Public Accountants, (AICPA) released the long-awaited Statement of Position 05-1: **Accounting by Insurance Enterprises for Deferred Acquisition Costs in Connection With Modifications or Exchanges of Insurance Contracts** (SOP or SOP 05-1). More than five years in development, the SOP provides guidance on how insurance companies should account for deferred acquisition costs (DAC) relating to insurance and investment contracts that have had modifications in product benefits, features, rights or coverages. The modifications can occur in various forms, such as a contract exchange, by amendment, endorsement or rider to an existing contract, or by the election of a feature or coverage within an existing contract. The SOP (and this article) refers to all such modifications as "internal replacements," thus defining the term more broadly than what the insurance industry may have referred to in the past as internal replacements (typically explicit contract exchange programs).

The primary issue addressed by the SOP is the treatment of DAC associated with replaced policies. Is the replacement considered to be a termination of the initial contract, which would therefore result in a reduction in the DAC asset? Or, is the replacement effectively a continuation of the original contract and, therefore, is there continued amortization of the DAC asset relating to



the original contract? In addition to the financial reporting impact, the SOP may have an effect on future policy designs.

This article provides a review of the requirements of the SOP, concentrating on the definition of an internal replacement and the criteria for determining whether such replacements are considered substantially changed. It also raises potential implementation issues, and raises the possibility that companies will consider modification to policy designs as a result of issues highlighted by the SOP. As companies develop, update and execute their in-force management strategies, the SOP generates further considerations for companies seeking to address profitability, customer service and compliance issues

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associated with customer-driven and company-driven replacements.

### Requirements of the SOP

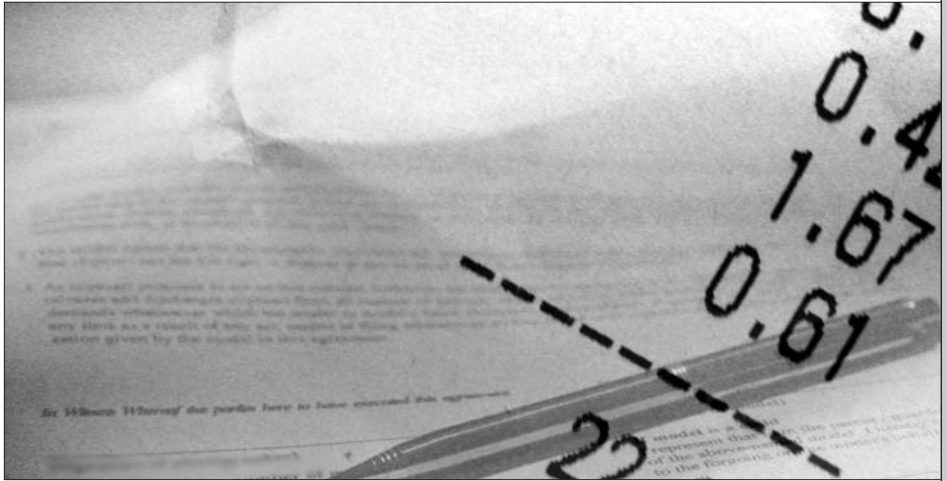
On the surface, internal replacements may not appear to be a difficult subject. It would seem that everyone knows what internal replacements are, or at least would be able to recognize one when they saw it. However, developing and applying a definition of an internal replacement that fits all situations is not simple once one gets into the details and variety of transactions that companies have with their policyholders. (For example, is there an accounting implication of adding a general account option to a variable annuity, or of adding a second driver on an auto policy?) Since the SOP contains extensive guidance, any reasonable summary of the SOP is sure to omit certain provisions that may be important to a company's specific situation. As always, readers (particularly preparers of financial statements) are strongly encouraged to read the SOP and not to rely on this or other summaries as their sole source of information.

### Overview

The initial guidance in the SOP covers whether the provisions of the SOP apply to specific contract exchanges or modifications by:

- Determining whether the internal replacement relates to the election of a benefit or right that was present in the existing contract. If so, determine whether it meets the exclusion criteria in the SOP.
- Determining whether the feature being added is a "nonintegrated contract feature," as defined in the SOP. If so, the feature is not considered to change the original contract, and is treated in a manner similar to a separately issued contract, thus not impacting the accounting for the original contract.

If the internal replacement does not meet either of the exclusions noted above, it is considered an integrated contract feature, and must meet all of the six conditions specified in the SOP to be considered a "substantially unchanged" contract. In general, that guidance in the SOP is:



- For internal replacements, which result in contracts that are "substantially unchanged," the replacement contract should be treated as a continuation of the original contract for the purpose of DAC amortization.
- Otherwise, when an internal replacement results in contracts that are "substantially changed," the original contract should be accounted for as a termination, and the modified contract accounted for as a new issue. In these situations, because the original contract is effectively considered extinguished, the DAC asset relating to the terminated contract can no longer be deferred. New acquisition costs associated with the replacement contract are to be capitalized and amortized as DAC if they meet the criteria for deferral, and amortization would be based on the characteristics of the replacement contract only.
- Accounting for sales inducement assets, unearned revenue liabilities and any additional liabilities (e.g., guaranteed minimum death benefits of variable annuities) associated with the original contract would be accounted for in a similar manner as described above for the DAC asset. That is, if the contracts are substantially unchanged, those balances would continue to be recognized as part of the replacement contract accounting. If the contract were considered substantially changed, those asset and liability balances would be accounted for as



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Perhaps at the heart of the SOP are the six criteria that must all be satisfied in order for a contract modification to be considered “substantially unchanged.”

part of the extinguishment of the replaced contract and the issuance of a new contract.

Although the guidance in the SOP is applicable to life as well as property & casualty insurance companies, life companies will experience the main impact

of the pronouncement.

### Definition of Internal Replacement

An internal replacement under the SOP could result from one of three main types of modifications to the benefit features in the contract:

1. A contract exchange (legal extinguishment of one contract and the issuance of a new contract),
2. Amendment or attachment of an endorsement or a rider to an existing contract, or
3. The election of a benefit feature, right or coverage within an existing contract.

The purpose of having such a broad definition of an internal replacement is to enable application of the guidance in the SOP consistently to similar transactions regardless of the form of the transaction. For example, the same accounting guidance applies to a variable annuity in the following two situations:

- a. Additional variable account investment options are added to the contract through a contract amendment, or
- b. The contract is replaced with another variable annuity, with the only changes being the addition of additional variable account investment options.

Similarly, the same accounting guidance applies when a guaranteed minimum withdrawal benefit (GMWB) is added to a variable annuity in either of two situations:

- a. A GMWB rider is added to a contract previously issued without such a guarantee, or
- b. The contract is replaced with a new contract where the only material change is the addition of the GMWB.

Likewise, there are instances when the election of a benefit feature within an existing contract will result in a contract modification, for example, when a guarantee feature can voluntarily be elected subsequent to contract issuance and the fee charged for this additional benefit is not specified until elected.

### Substantially Unchanged

Perhaps at the heart of the SOP are the six criteria that must all be satisfied in order for a contract modification to be considered “substantially unchanged.” While all six are important, the first two criteria involving the insured event and investment return rights are the most critical for the usual contract modifications currently occurring in the marketplace.

1. The first criterion requires that there be no significant change in the kind and degree of insurance risk within the contracts. For example, replacing a mortality contract with a morbidity contract changes the kind of insured event. In addition, although a life insurance contract and a life contingent payout annuity both contain mortality risk, they are clearly different types of mortality risk.

When the kind of risk is determined to be the same, the degree of risk needs to be assessed. That determination will be subjective as there is no specific guidance in the SOP on how to measure “degree of risk.” Re-underwriting all or a portion of the original base contract will generally result in a substantial change to the insurance risk. Companies will need to develop and consistently follow an accounting policy on what constitutes a significant change in the degree of risk.

2. The second criterion requires that there be no change in the nature of the investment return (i.e., the manner in which the policyholder’s investment return rights are determined). The SOP provides examples of various ways that interest may be credited in the policy—either by formula (such as that found in equity indexed products), pass-through of actual performance (such as that typically found in separate account products), or credited at the discretion of the insurance company (the typical general account product design). Changes between these three different types of interest crediting would fail the “substantially unchanged” test and require the original contract to be considered terminated and the modified contract to be considered a new issue.

One of the most challenging aspects of application is likely to be in the interpretation of what constitutes a change in the degree of mortality risk and in the nature of investment return for modifications relating to complex contracts such as variable contracts

with minimum guarantees. For example, variable contracts with existing mortality guarantees may be modified to offer enhanced mortality guarantees. In some cases, the enhancement may be deemed to be so significant as to result in a substantial change, while in other cases, it may not. The addition of a significant investment floor, such as a GMWB added to a variable product, is considered to be a significant change. Interestingly, it is not clear in the SOP if the deletion of such a floor should also be considered a substantial change. If the original contract contains a clear right of the policyholder to delete the coverage, this type of transaction could be interpreted as not being an internal replacement subject to the guidance in the SOP. In analyzing the effect of the SOP on a change in the investment floor, the company will need to consider the degree of change associated with the modification when applying the SOP to this type of transaction.

The remaining four criteria include provisions that the internal replacement not require any additional deposit/premium/charge, a reduction in the contract holder's account value, a change in the participation or dividend features or a change in the amortization method or revenue classification of the contract. If any of the criteria are not met, then the internal replacement is deemed to be a "substantial change."

### Integrated vs. Non-Integrated Benefit Features

The SOP recognizes that there may be certain riders, benefit features, endorsements or coverages that function as separate contracts from the original contract. The underwriting and pricing for a non-integrated benefit are typically executed separately from other components of the contract. An accidental death benefit rider added to a whole life insurance policy is an example of a non-integrated benefit. In contrast, an integrated benefit feature for a long-duration contract, such as a universal life policy, is one in which the benefits provided by the feature can be determined only in conjunction with the balances related to the base contract. A GMWB is an example of an integrated benefit feature.

Under the SOP, the addition of a non-integrated benefit feature should be accounted for as if the feature is a separate contract, and, therefore, most of the other provisions of the SOP are not applicable. In contrast, additions or changes determined to be integrated features require further analysis to determine whether the addition of the integrated feature



produce a contract that is substantially changed or substantially unchanged.

Now if you think this is all getting a little complicated, you are not alone. The Accounting Standards Executive Committee of the AICPA thought so as well. Included as Appendix C of the SOP is an application flowchart designed to help clarify the complicated steps.

### Prospective Revision Method for FAS 60 Products

An interesting provision in the SOP is the requirement to use a "prospective revision" method for applying the SOP for FAS 60 products that are substantially unchanged. Under the prospective revision method, DAC balances at the time of the transaction are unchanged, and any changes in the contract are reflected in future amortization only. Interestingly, the SOP states that this method is considered an appropriate application of the FAS 60 guidance on premium changes for indeterminate premium life insurance and guaranteed renewable health products. Although many have already considered this to be the appropriate GAAP accounting treatment for premium rate changes under FAS 60, the guidance in the SOP appears to be the first time this issue has been addressed in authoritative GAAP literature.

### Implementation

Although the SOP has a required effective date of January 1, 2007, companies that have not begun to implement the SOP are probably already behind schedule. The long lead time was set knowing that the SOP will be difficult for many companies to implement.

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In addition, companies are likely to want to take proactive steps in managing their inforce or adjusting their new business product portfolios in advance of implementing the SOP.

The following steps are suggested as an approach to implement the SOP:

1. Prepare an inventory of current and expected potential internal replacement transactions (types and volume).
2. Determine whether any of the transactions meet one of the two exclusions provided by the SOP (i.e., either election by the contract holder of a benefit, feature, right or coverage that was within the original contract or qualifies as a non-integrated feature).
3. Determine whether each transaction that does not qualify for exclusion is an internal replacement resulting in (a) a substantially unchanged contract or (b) a substantially changed contract.
4. Follow the appropriate SOP accounting for the related deferred acquisition cost asset, sales inducement asset, unearned revenue liability and any additional liability categorized in Step (3) above.
5. Identify when the accounting treatments identified in Step 4 differ from a company's current accounting policies.
6. Create or modify administrative and accounting information systems as appropriate to capture the required information for implementing the SOP. DAC amortization models will likely need to be modified to properly account for internal replacements under the SOP.


For companies that are part of a large group of affiliated companies with multiple insurance company legal entities, the implementation of the SOP may be particularly challenging for several reasons. First, for a consolidated financial statement presentation, an internal replacement under the SOP could result from the replacement of a policy from one company by one from a different but affiliated company, causing the need to be able to track such replacements within the entire organization. In addition, the accounting for internal replacements may become even more taxing if stand-alone financial statements are also necessary for individual companies within the entire group.

### Longer Term Effects

It is reasonable to predict that companies will not want to increase DAC amortization every time a floor is added to a separate account product. It is also reasonable to expect that product design professionals will consider, among other factors, how changes in contract designs effect the results in their GAAP

financial statements, and may choose a design meeting other company objectives that lessens the effects of the SOP. Will, for example, the provisions in the SOP now make it more attractive for companies to fix the price at issue of the original contract of certain elect-able benefits? Will companies find a way to design product features so that they are considered to be non-integrated under the SOP? For example, would a GMWB tied to an outside index be as attractive to a company or a policyholder as one tied to the policyholder's specific account value? These are just a couple of examples of how the SOP may affect future policy design.

### Conclusions

SOP 05-1 seeks to address current diversity in industry practice on accounting for internal replacements, providing authoritative and relatively detailed guidance for insurance entities. The required effective date of 2007 recognizes the administrative challenges, including likely systems development work, for implementation. In addition, companies are likely to want to take proactive steps in managing their inforce or adjusting their new business product portfolios in advance of implementing the SOP. As a result, the author strongly encourages companies to quickly begin a process to review in detail the guidance of the SOP, establish cross-functional teams to identify the variety of situations addressed by the SOP, and develop the administrative and financial system applications to track and implement the accounting requirements. 

# Thoughts from the Chair

by Darin G. Zimmerman

The structure for the inaugural column for the chairperson's corner is largely determined by tradition: 1) perfunctory remarks; 2) thank the previous chairperson; 3) laud heaping praise on the other council members; and 4) briefly describe your vision for the direction of the council in the upcoming year. Given that I plan to follow this tradition (mostly), I really have no excuse for being three weeks late in my submission of this column. Nonetheless, I am. So without further delay, here is the rest of the column:

## Preliminary Remarks

Were you aware that "perfunctory" means "done routinely with little interest or care?" I'm certainly not going to deliver these words with "little interest or care" and so my first official act as chairperson will be to rename the opening section of the inaugural column. I find it ironic that my first act in following tradition is to change things. I imagine all of the sections' chairpersons are pondering this curiosity.

The nature of life is one large balancing act. The act of leading any institution requires one to find the right balance of things to leave alone and things to change. My survey of the section's current situation shows that things are humming along pretty smoothly. This is my way of saying, "Don't expect dramatic changes." I anticipate that we will continue the section's mission of delivering a host of educational opportunities and funding research. The items I will try to change are described more fully in the last section.

## Thank the Previous Chairperson

Speaking of "humming along smoothly," our section owes a debt of gratitude to Tom Nace. Here my remarks are the opposite of perfunctory. There were a number of changes at the SOA during 2005. The SOA implemented a number of initiatives contained in the SOA Strategic Plan, aimed at improving SOA membership value, knowledge management, the marketplace relevance of actuaries and advancing external recognition of our professional community. These are all worthwhile goals to be sure, but success requires a lot of additional effort on the part of the section councils' chairpersons to transform these goals into concrete actions aimed at achieving the goals. I think Tom did an admirable job of taking these intangible concepts and



transforming them into initiatives with form and substance.

And if those challenges weren't difficult enough for Tom, 2005 also saw the retirement of Lois Chinnock. Lois had been a fixture at the SOA for a number of years, and she had handled all of the administrative details for our section. To say that Lois was incredibly good at her job is an understatement of monumental proportions. The next time you run into a former chairperson of our section (like Mark Freidman, John Bevacqua, Tom Herget, or Shirley Shao) simply mention Lois's name. No matter how many nice things I say about her, you will still be surprised by the testimonials these people will offer on Lois's behalf.

## Laud Heaping Praise on Our Council Members

I am fully aware that my remarks can at times seem flippant. They are not intended to be. Furthermore, it would be a travesty if my remarks here were believed to contain even a hint of insincerity. Perhaps it's the time of year (today is December 23), but I find myself reflecting on the subtle distinction between being lucky and being blessed. Both words are synonymous with the condition of good fortune; however, I believe the latter is the reason I will get to serve with the following people:

- Henry Siegel is the council's vice chair. He is diligent, dependable and experienced, and has been extremely helpful.



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There is no question that the SOA is committed to providing our council with the resources it needs to succeed.

- Kerry Krantz is our communications and publications coordinator. He has worked tirelessly to develop and expand our Web site.
- Rick Browne is treasurer and newsletter editor. Rick is
- Educate actuaries as to the differences between the AAA and the SOA
- Work with the AAA to help promote the actuarial profession
- Develop a policy of surplus management for the section.

incredibly understanding when I miss my deadlines. He is also very creative in awarding the FROSTIES and FRUMPIES.

- Yiji Star is our membership coordinator.
- Mike Leung is our continuing education coordinator and is in charge of coordinating the SOA Spring Meeting program.
- Jerry Enoch is our secretary and research team coordinator. He is also the past newsletter editor.
- Ted Schlude is our basic education team coordinator.
- Vincent Tsang is our marketplace relevance team coordinator

I also need to mention Mike Bell, a staff actuary at the SOA; Jeremy Webber, who is our project support specialist; and Errol Cramer, who is our Board of Governors partner. There is no question that the SOA is committed to providing our council with the resources it needs to succeed.

### Vision for the Future

As I pondered what to write in this inaugural column, I found myself often thinking of the phrase, "The vision thing." As you may recall, the current president's father was mercilessly (and appropriately) mocked for casually dismissing the most important component of leadership as, "The vision thing." I've always associated this comment with the mental picture of Dogbert dismissively waving his paw and grunting, "Bah!"

Currently my vision includes the following objectives:

- Continue and improve on the development and delivery of basic educational opportunities:
  - o SOA Spring Meeting Program
  - o SOA Annual Meeting Program
  - o Seminars (GAAP, Principles-based reserving, etc.)
  - o Webcasts (IAS, Fair Value Measurement, etc.)
- Continue and improve the section's quarterly newsletter by ensuring that it contains informative, interesting and timely articles
- Identify and implement initiatives aimed at achieving the objectives laid out in the SOA's Strategic Plan

And finally, identify and recruit a slate of talented and enthusiastic candidates for next year's section elections.

I think this vision is ambitious without being overly ambitious (that is, just the right balance.) And I could really use your help. Please send me your thoughts and ideas throughout the year in order to help me with the objectives outlined here. If you have research ideas, or ideas for newsletter articles, or if you can think of a topic that would make a really excellent webcast, please send an e-mail to [dzimmerman@aegonusa.com](mailto:dzimmerman@aegonusa.com). §



# Greetings

by Rick Browne

**T**he *Financial Reporter* has featured several articles in the past year on the fair value of liabilities, with good discussion of the “own credit risk” question: if and how the credit risk of an insurer should be reflected in determining the fair value of its insurance liabilities. The December 2004 issue contained Don Solow’s article “On the Fair Value of Insurance Liabilities.” Then in September 2005 we carried Luke Girard’s piece, “On the Fair Value of Insurance Liabilities—The Other Viewpoint,” and in December 2005 another article by Luke which introduced the concept of the regulator’s option in “On the Fair Value of Insurance Liabilities: The Regulator’s Option.”



In this issue we follow up with two more articles on this topic. The first is a rebuttal by Don Solow to Luke Girard’s September article. The second is a different, but complementary, perspective on Luke’s regulator’s option article written by Mike Davlin. I hope our readers will find this ongoing and lively discussion to be informative and interesting.

The March issue also includes an article by John Morris on SOP 05-01, which addresses GAAP accounting for DAC on internal replacements. This is one in a series of articles for *The Financial Reporter* prepared by the American Academy’s Life Insurance Financial Reporting Committee (LIFRC). This SOP is effective next year (2007).

As a complement to last issue’s article by Tim Ruark on some of the practical considerations involved in implementing the C3 Phase 2 requirements, we have in this issue the results of a Deloitte survey on C3 Phase 2 practices reported by Patricia Matson and Don Wilson.

Finally, Ted Schlude has provided us with his report on the December 2005 meeting of the NAIC Life and Health Actuarial Task Force. Thanks to Ted for another excellent update. **S**

– Rick

## Reserve your copy of *U.S. GAAP for Life Insurers*

Make room on your bookshelf for the second edition of *U.S. GAAP for Life Insurers*. After over a year of work, the new edition is available. The authors have teamed up to provide text in these new and emerging areas:

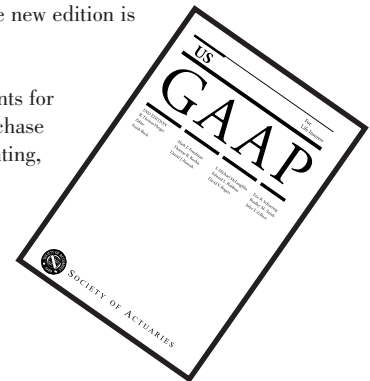
Sales inducements, persistency bonuses, other SOP 03-1 issues, FAS133 interpretations including B36, treatments for GMDB, GMAB, GMIB, and GMWB, no-lapse guarantees, EIA valuation, shock lapse examples, totally new purchase GAAP addressing FAS141 and FAS142, VA DAC practices, more foreign product examples, reinsurance accounting, fair value perspectives and GAAP balance sheet and income statement examples.

These are covered in 200 new pages and 100 new spreadsheet examples.

The cost of the new book is \$115. If you need the old as well as the new, it’s \$150 for both.

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The Section Council thanks authors Frank Buck, Mark Freedman, Tom Kochis, Dan Kunesh, Mike McLaughlin, Ed Robbins, Dave Rogers, Eric Schuering, Brad Smith, editor Tom Herget and overseer Shirley Shao for this fine effort.



# RBC C3 Phase II: Easier Said Than Done

by Patricia Matson and Don Wilson



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Most life insurance companies have faced the challenge of implementing the recently adopted Life Risk-Based Capital Phase II Instructions, which include new requirements for variable annuity contracts. Adopted by the NAIC on October 14, 2005, the new requirements are effective for year-end 2005 and require a stochastic modeling approach (subject to a minimum “standard scenario” requirement) for determining the C3 component of risk-based capital for variable annuities. The approach is complicated, involving multiple steps and certain choices. A background summary of the approach is shown in the shaded box.

In December 2005, when companies were in the midst of implementing the new regulations, Deloitte Consulting LLP performed an industry survey regarding the application of the new rules. The results of that survey were shared with the participants and are outlined in this article.

## Background

The new requirements involve determination of a “Total Asset Requirement,” or TAR, as the greater of (1) the results of a stochastic projection and (2) the results of applying the “Standard Scenario.” The C3 market risk component of RBC is the excess of the TAR over reported statutory reserves (with a floor of 0), after smoothing and transitional rules and a possible tax adjustment.

The stochastic projection is performed using “real world,” as opposed to risk neutral, assumptions for generating the economic scenarios. A minimum of 1,000 scenarios are required, and the scenario generator used must meet specific calibration points specified by the American Academy of Actuaries’ report. Assumptions are to be based on “prudent best estimates.” Limits on reinsurance ceded (such as caps on recoveries and/or floors on premiums) must be recognized. While some companies are using a seriatim approach to modeling, compression of policy data into representative model cells is allowed to minimize run time.

Each stochastic scenario’s result is the lowest year-end present value of future projected surplus (for the business in aggregate). The total asset requirement equals the negative of the mean of the results for the 10 percent “worst” scenarios (conditional tail expectation 90, or CTE 90).

In modeling the underlying assets, any existing hedging assets must be included. In addition, if the company has a “clearly defined hedging strategy,” credit for the hedge strategy can be taken in the projections. Companies may use an integrated economic model to assess both interest rate and market (equity) risk, but there are also several “shortcut” approaches suggested for modeling interest rate risk, in the event that an integrated stochastic approach is not feasible.

The standard scenario involves a deterministic model with specific assumption requirements as specified in the RBC Instructions. These assumption requirements include specified:

- Separate account returns, which involve an initial shock drop in account values and a modest return thereafter
- Portions of contractual charges
- Lapse and benefit election assumptions that are dependent on the “in-the-moneyness” of the underlying contracts
- Mortality rates

The standard scenario results must be calculated for each policy.

## Survey Results

In the course of implementing the requirements, several companies have encountered issues regarding interpretations of the requirements, difficulties modeling certain aspects of the business and concerns with the results. In light of the numerous issues and questions raised, we decided to perform a brief survey regarding some of the most significant issues raised to us and then publish the results in this article. A total of nine companies participated in the survey.

Several of the items addressed in our survey were still being discussed, and therefore the final decision for many companies had not been made at the time this article went to print. Our results reflect the companies' thinking on these topics at the time of the survey, and are subject to change in the final analysis.

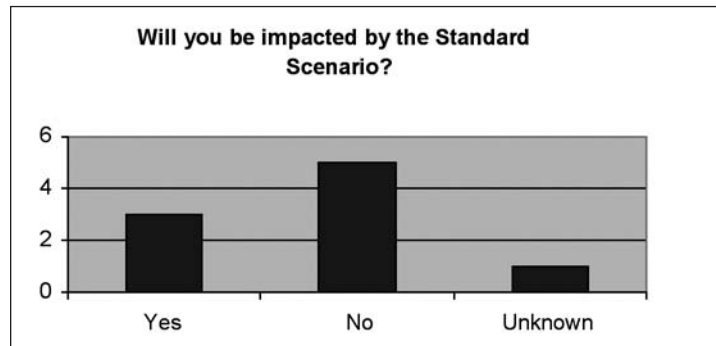
We asked the following questions of our survey participants:

- 1) Do you expect to be impacted by the standard scenario?
- 2) Are you using smoothing and transition?
- 3) Are you using a "clearly defined hedging strategy?"
- 4) Are you planning to have a peer review?
- 5) Do you expect RBC levels to increase or decrease?
- 6) Are you using an internally developed system or a packaged software (if packaged, which one)?
- 7) How are you:
  - i) Projecting fixed assets
  - ii) Dealing with small legal entities
  - iii) Modeling limits on reinsurance ceded
  - iv) Splitting the resulting total asset requirement and the RBC between interest rate risk and equity risk.

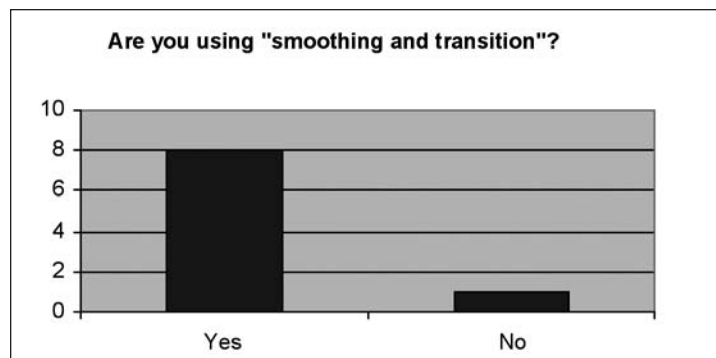
The results of our survey are summarized in the following charts on pages 11, 12 and 13.

## Other Issues

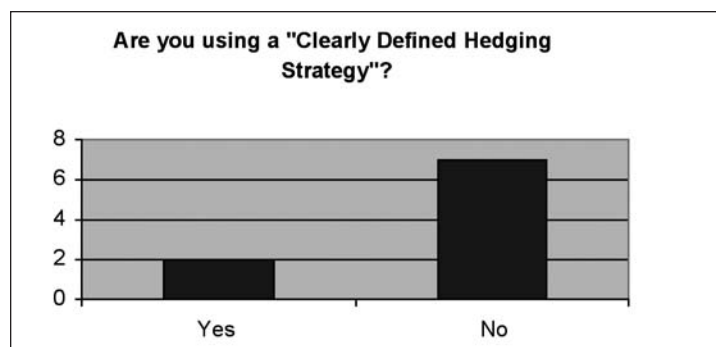
In addition to these specific questions, we asked our survey participants to provide feedback on other issues they are facing. Several companies indicated that timing was an issue—several are struggling to get the work done in time to meet the filing



*Five of nine companies that responded said that they would not be impacted by the standard scenario. In the event of a significant market decline, the standard scenario would likely have a more significant impact. Only one company of nine has not yet determined the impact of the stochastic versus standard scenario approach.*

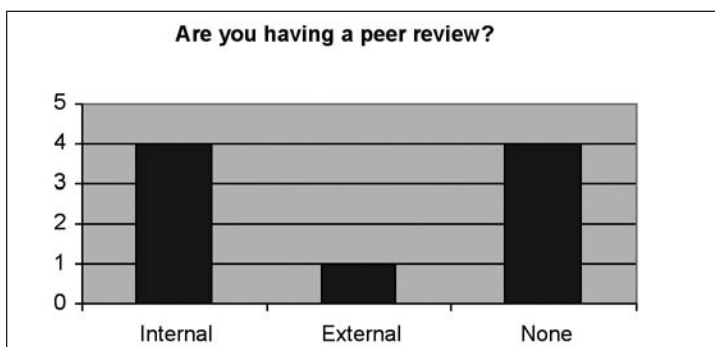


*Only one company has decided not to use smoothing and transition, and therefore the full impact of the new requirements will be reflected for year end 2005 for that company.*

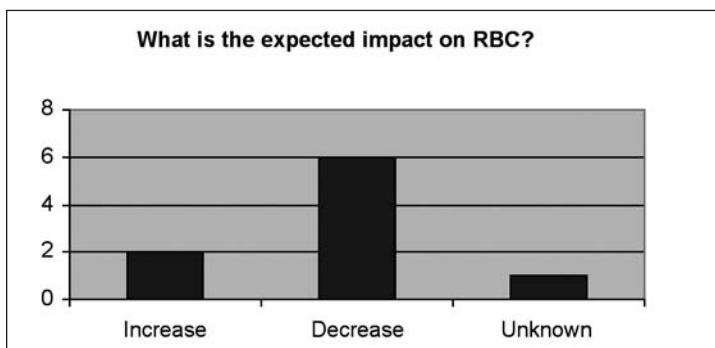


*Although few of the participants will be using a clearly defined hedging strategy for purposes of the year-end 2005 calculation, some of our "no" respondents indicated that they are currently hedging and two indicated that they intend to implement such a strategy for future RBC C3 Phase II valuations.*

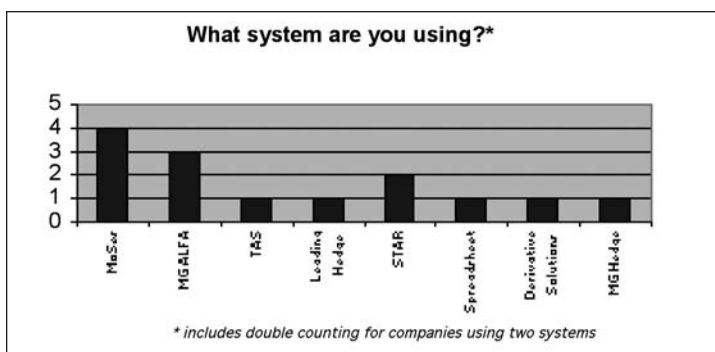
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As suggested by the AAA Report, five of the companies in our survey will be having a peer review for year-end 2005. In all but one instance, the peer review will be internal. Of those companies that do not plan to have a peer review at year-end 2005, all but one indicated that they will likely have one performed in the future.



Most respondents indicated that their results were tentative at the time of our survey; however, the majority indicated that RBC levels were likely to decrease as a result of RBC C3 Phase II. Both companies that indicated RBC would increase were also impacted by the standard scenario.

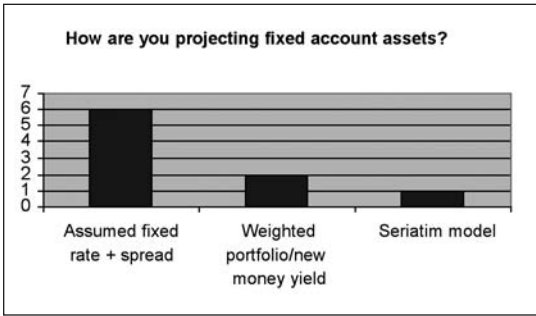


As indicated by our survey, there is wide variation in systems used to perform the calculation, and several companies are using more than one system. In addition, we are aware of some companies that are having a parallel run performed in an alternate system as a mechanism to test their results.

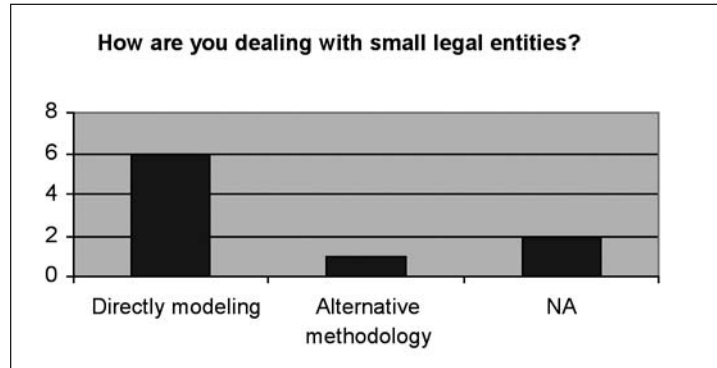
requirements for 2005. The following additional issues were also mentioned:

- Interpretation of the AAA report: There are several areas in which the AAA report is ambiguous, and there are some apparent inconsistencies between the AAA report and the RBC instructions. This may lead to inconsistent results from company to company, and may require some follow-up clarification to reach resolution.
- Incomplete programming of the standard scenario in packaged software: Due to the relatively late adoption of requirements, software vendors have struggled to completely define and test the necessary coding in their packages systems.
- How results should be adjusted for taxes.
- How best to organize results for reporting: Meaningful to management and provide the appropriate detail for regulators.
- How rating agencies will interpret results: In light of the complexity, a significant amount of communication with the rating agency community will be required, particularly if results look different from most of the industry.
- Model run time: This was an issue for several companies, some of whom indicated that an overnight run was required.
- The impact on results of performing a “model point,” rather than seriatim, valuation: Some companies expressed concern that a model point approach would understate results, while others found little difference running seriatim versus model point models. This appears to indicate that careful determination of grouping rules is critical.
- Meeting the criteria for a clearly defined hedging strategy: As per our discussion there, a couple of companies with a hedging program had not incorporated it into their model for year-end 2005.
- Developing appropriate future revenue sharing assumptions after existing contracts expire: Since the requirement for assumptions is “prudent best estimate,” it may not be appropriate to assume current levels of revenue sharing will continue in the future.

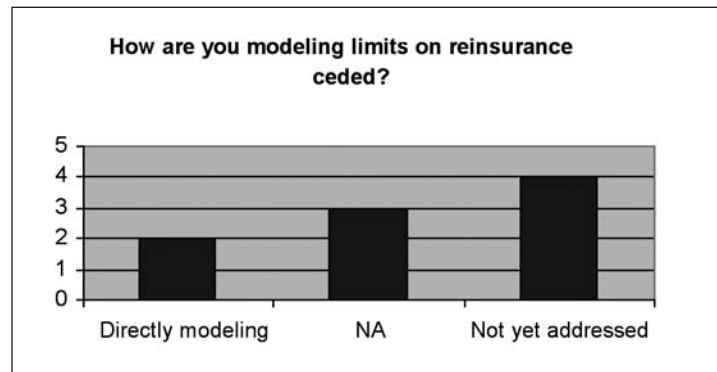
As evidenced by our survey, there are several areas of uncertainty and some wide variations in practice currently. Most of the responses we received were identified as “current state” and subject to change as models are finalized. It will be interesting to see



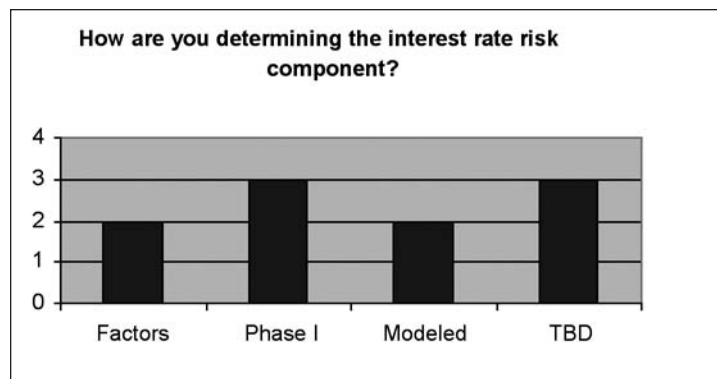
Only one company in our survey has the capability to directly project assets backing fixed accounts in their RBC model. Most companies are assuming a specified earned rate (typically based on Treasury yields) plus some spread. Two companies are projecting their assets in a separate model and using the result to determine a weighted average yield taking into account current fixed assets and future investments, and then inputting that result into their liability model.



The majority of companies we surveyed are directly modeling RBC C3 Phase II for all legal entities. One company is using the alternative methodology for a small subsidiary.



Most companies had not yet finalized their methodology for modeling limits on reinsurance ceded at the time of our survey. Due to the complexities of such limits for many treaties, adequately reflecting this in the models can be difficult. For the most part, those surveyed did not believe this would materially impact their overall results.



Most of the companies we surveyed will continue to use either the factor-based approach or the RBC C3 Phase I approach to calculate the interest rate component of RBC (one company indicated they would use one of these two methods, and therefore is counted twice in the chart above), and three companies had not yet decided on a methodology. Only two companies indicated that they would directly model interest rate risk by using an integrated stochastic interest rate generator in the C3 Phase II model.

how practice evolves, and how results are impacted as companies continue to refine their approach.

We plan a further, wider survey once results have been filed, to help companies move forward towards December 2006, when it is likely that the VACARVM reserving requirements will also be in place. If you would like to participate in this survey, please contact the authors. [S](#)

# On the Fair Value of Insurance Liabilities: The Continuing Debate

by Don Solow



The September 2005 issue of *The Financial Reporter* contained an article by Luke Girard entitled “On the Fair Value of Insurance Liabilities: The Other Viewpoint.” Mr. Girard’s article was written in response to my article in the December 2004 issue.

Mr. Girard appears to agree with my argument that a policyholder, in purchasing a policy or contract from an insurance corporation, writes a credit put to the owner of the corporation. Where we appear to disagree is on the question of which balance sheet this put belongs on: the corporation’s or the owner’s. According to Mr. Girard, “The put arises because of the limited liability of the corporation, thus the company owns the put written by the policyholder. And because the company owns it, it inures to the benefit of the owner of the company. The owner’s only interest is in the equity of the company and *limited liability means the value of that equity cannot be negative.*”

I believe Mr. Girard’s statements are incorrect. First, a corporation does not have limited liability: its owners do. I quote from *investorwords.com*, which defines a corporation as “The most common form of business organization... This form of business is characterized by the *limited liability of its owners...*”. In the same vein, the legal Web site *www.nolo.com*, in its definition of corporation, states: “One advantage of incorporating is that a corporation’s owners (shareholders) are legally shielded from personal liability for the corporation’s liabilities...”.

Second, limited liability does not mean that shareholders’ equity cannot be negative. Shareholders’ equity is just another name for net assets or net worth, and is simply the arithmetical result of subtracting total liabilities from total assets. Consider a corporation, which has cash of \$100 and an account payable, immediately due, of \$110. Clearly, the amount of net assets of the corporation, or its shareholders’ equity, is negative. Limited liability means that the owner or shareholder of a corporation cannot lose more than the amount invested. It does not mean that corporate liabilities cannot exceed corporate assets.

Mr. Girard takes the position that the credit put belongs on the corporation’s balance sheet as a component of shareholders’ equity. In order for this to be true, the credit put must be shown to be an asset of the corporation. I believe it can be demonstrated that the credit put is *not* an asset of the corporation.

An asset is an economic resource. It is property. Characteristics of the owner of any property include (1) the right to sell, transfer or otherwise assign the property to another party and (2) the ability to enjoy a benefit from an increase in value of the property, and to suffer harm from a decrease in value. We can consider the credit put in light of these characteristics. The owner of the credit put can transfer (or even relinquish) the credit put by, for example, writing a guaranty of the corporation’s liabilities for the benefit of creditors, issuing a net worth maintenance agreement, or co-signing a stand-by letter of credit. In addition, creditors will place higher value on these guaranties as the corporation’s credit quality decreases. This means the market price for such a guarantee will go up as credit quality goes down. However, this is just another way of saying that the value of the owner’s credit put goes up as credit quality goes down. We see, then, that the characteristics of the credit put are such that only the owner of the corporation has the right to transfer the put, and only the owner of the corporation realizes increasing value of the put from a decrease in credit quality. Conversely, the corporation itself has no right to transfer the put. It cannot force the owners to guarantee the corporation’s debts or otherwise to accept additional liability. It cannot force the owners to relinquish their rights to

limited liability. The corporation, in fact, enjoys none of the benefits of the put. Therefore, the put cannot properly be viewed as property of the corporation, but only as property of the shareholders. This means the put is not an asset of the corporation and, by definition, cannot be a component of its net worth.

Reasoning from basic economic principles, we can use the arguments presented here to conclude that the credit put is owned by the shareholders of an insurer and is not part of the insurer's own accounts. We can reach, I believe, the same conclusion by reasoning from the practical basics of financial statements. Specifically, the goal of a financial statement is to produce useful information for users of the financial statement. The users are interested in making certain economic decisions about the enterprise, which may include investing in the enterprise, re-appointing (or replacing) its management and so on.

Let us consider, in this light, two identical insurance companies, termed Company A and Company B, both rated AAA currently. Suppose both companies have agreed by contract to make a payment to a policyholder of \$1,000 in five years' time. Let us assume the five-year AAA spot rate is 5 percent. If we accept Mr. Girard's arguments, each company should value its liability at  $\$1,000 \times (1.05)^{-5}$ , or approximately \$784.

Let us further assume, immediately following the issuance of this contract, that Company B hires the Three Stooges as its management. (*Please do not write to me saying the Three Stooges are already managing your company*). Anticipating future problems, the market reacts by adding three percentage points to Company B's credit spread.

If we accept the idea that liabilities of Company B should be valued using Company B's current credit spread, the new liability value becomes  $\$1,000 \times (1.08)^{-5}$ , or \$681. Since the assets of the company have remained unchanged, the effect of hiring the Stooges is to increase reported net worth by \$103. On the other hand, Company A's net worth remains the same.

A user of financial statements could reach a number of conclusions: (1) Company B is worth more than Company A, even though both companies have made the same contractual promise, (2) the Stooges are excellent managers, having increased the net worth of the company very quickly, (3) Company B is a better investment opportunity and (4) Company B has more surplus to absorb deviations. I believe the absurdity of all these conclusions suggests that



Company B's financial statements are not useful to users of the statements, whether those users are current shareholders, potential investors, lenders, rating agencies or regulators. The financial statements could cause the user to make poor economic decisions.

By reasoning, then, either from economic principles or from the practical purpose of financial statements, I believe that it is incorrect to assert that the credit put is part of shareholders' equity.

I would like to turn to some other comments made by Mr. Girard in his article. First, Mr. Girard states that the use of a risk-free discount rate is inconsistent with past practice. This is true. My December 2004 article did not deal with the merit (or lack thereof) of deviating from past practices, so I will not address the point here, other than to indicate that, by definition, any change in accounting method is a deviation from past practice.

Second, Mr. Girard expresses concern that discounting at the risk-free rate "... could lead to life insurers reporting losses when writing profitable new business." My article addressed only the valuation of liabilities, but the following observations can be made. Suppose a company issues a contract with a \$10 profit load, which is priced under the assumption that the insurer will earn a rate of 6 percent. Suppose the risk-free rate is 5 percent, and suppose further the contract requires a payment of \$1,000 in five years' time. The insurer collects \$10 plus  $\$1,000 \times (1.06)^{-5}$ , or \$757, and establishes a liability of  $\$1,000 \times (1.05)^{-5} = \$784$ . It would appear, upon issue, that the insurer has suffered a loss of  $\$784 - \$757$ , or \$27.

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I remained convinced that the IASB's use of issuer credit spreads in valuing liabilities is both economically incorrect and produces less-useful financial statements.

Presumably the 6-percent rate is the rate expected to be earned on some sort of risky security. Let us assume the risk is a default risk. The actual rate of return on the security can only be known as time passes. That is, we do not know upon issuance of the contract if the risky security will default (and

hence yield less than 6 percent) or not default (and hence yield 6 percent).

From an economic perspective, the issuer has suffered a loss at issue. This can be demonstrated by comparing the amount received for the policy to the economic cost of issuing the contract. The economic cost of the contract is the cost of completely defeasing the liability. This defeasement can be accomplished in two ways, either by selling the risky security and buying a risk-free security that precisely matches the liability, or by retaining the risky security and buying credit protection in the market. Under the first option, the insurer sells the risky security for \$747 and buys risk-free instruments for \$784, suffering a loss of \$37 less the load of \$10, or \$27. In the second case, the cost of the credit protection is \$37 (the present value of the credit spread), so the loss is again \$27 after considering the \$10 load.

In summary, I would like to commend Mr. Girard for adding his thoughts to the ongoing debate. Nevertheless, I remain convinced that the IASB's use of issuer credit spreads in valuing liabilities is both economically incorrect and produces less useful financial statements. §

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# The Fair Valuation of Insurance Liabilities: The Information Set Perspective

by Mike Davlin

In his most recent in a series of insightful articles on the fair valuation of insurance liabilities (December 2005 *The Financial Reporter*), Luke Girard identified and introduced the very real concept of the regulator's call option, and ably discussed how its recognition by insurance accounting systems can better align stakeholders' interests and incentives. In so arguing, I believe Luke is right on the money. As often happens when ideas are in the air, I recently arrived at the very same destination as Luke but from an entirely different starting point: the new C3 Phase II capital regulations for variable annuities. I believe our two perspectives are complementary, and together might identify common ground between insurers and regulators where future discussions on fair valuation can less contentiously be advanced. In this short note, I hope to describe my own path to Luke's discovery, reformulate the issue from the currently fashionable perspective of credit risk theory, and then briefly suggest how that reformulation might allow future debate to center around technical rather than ideological issues.

While a constructive criticism of the new C3P2 regulation is far outside the scope of this note, I think it is fair to observe that, beyond the expense of compliance, its implications for financial management are not obvious. In order to get my own mind around the essence of C3P2, I tried to identify what sort of financial instrument the new regulation most resembled, and then considered whether or not it made economic sense for an annuity writer to initiate hedging activities in reaction to its having to issue this instrument. There remains no element of surprise in my revealing my own conclusions. From the perspective of management, C3P2 represents a barrier call option with a zero strike price. In respect to a company that writes only variable annuities, it gives regulators a knock-in call option for control of the insurer, or at least raises the call boundary of the existing regulatory option Luke described in his article. If and when the C3P2 framework is extended to other product lines, they will jointly determine a new



dynamic boundary on the regulator's call on corporate control for all types of insurers.

As Luke correctly noted, the regulator's option has real economic value that reduces the economic value of the firm to all stakeholders with claims junior to those of policyholders—most obviously, stockholders, but bondholders as well. That insight enables us to see that, even if C3P2 granted no liability credits for clearly defined hedging strategies, stockholders and bondholders now have an increased interest in seeing that the insurer's management reduces the value of the regulator option. This can be effected either through the liability side, by reducing guarantees or increasing fees, or on the asset side, through an investment strategy that includes capital market hedges and conventional indemnity reinsurance. In the presence of C3P2, hedging creates its own reward by partially reversing the newly increased economic value of the regulator's call option.

From the perspective of policyholders, C3P2 and other minimum asset requirements create a *protective covenant* that is missing from the capital instruments they have purchased from the insurer. Other more informed and better bargaining purchasers of capital instruments routinely insist such covenants be placed in their bond debentures. As do other

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The academic literature on credit risk reflects an ongoing debate over the relative superiority of two types of models: Structural models...and Reduced Form Models ...

debt covenants, statutory capital standards attempt to minimize agency costs by defining an intervention boundary, a point at which claimants can step in to protect their interests. I note in passing that any debt issued by an insurance company likely creates an

unrecognized intervention barrier in addition to that of the regulator's option. Even the most staunch proponent of unfettered insurance markets—arguably, the present writer—can admit to both the presence of agency hazards and, while he might be inclined to quibble about its form and level, to some form of protective covenant for policyholders being both unobjectionable and necessary. In the absence of such a covenant, the economic value of an insurer's promises to its policyholders is reduced by possible future states of the world wherein the insurer's total assets are exhausted. Management's tenure lasts until bankruptcy, a stopping point before which all claims can be met in full, and after which no claim can be met. In the presence of a protective covenant, such as C3P2, management's tenure lasts until default, an earlier stopping point before which all claims can be met in full, and after which all claims can be only be partially met, but in a way that more equitably allocates a smaller and earlier shortfall to a larger group of claimants.

Whether the stopping time for management's control is defined by actual bankruptcy or by formulaized default, it can be modeled in a manner similar to the stochastic analysis required by C3P2. The excess of the fair value of policyholder claims in the presence of a regulator defined default barrier over the corresponding fair value under a bankruptcy barrier is exactly the fair value of the regulator's option; the fair value transferred to policyholders from other lower priority stakeholders. By incorporating bankruptcy and default scenarios, cash flows can be discounted at the risk-free rate, side stepping the nettlesome question of the appropriate transformation of own credit risk into higher than risk-free discount rates for valuing promised benefits in a different type of model. In this approach, the shortfalls from bankruptcy and default are directly simulated, enabling the calculation of probability term structures for

hitting each barrier. This sort of modeling is extremely detailed, and both consumes and produces an immense amount of information not normally visible to outside observers, such as rating agencies, regulators, and participants in capital markets.

The academic literature on credit risk reflects an ongoing debate over the relative superiority of two types of models: structural models and reduced form models. Structural models, which were first introduced by Merton, Black, and Scholes, appraise default risk by simulating a firm's total assets and liabilities. Reduced form models, introduced by Jarrow and Turnbull, attempt to directly model default time as a stochastic process calibrated to publicly available information on the firm, or similar firms. In a 2004 working paper, Jarrow and Protter discussed this debate over the relative merits of these two models. They made the cogent observation that neither model form is uniformly superior; whether one or the other is to be preferred in a given situation depends entirely on the information available to the modeler. Jarrow and Turnbull dub their analysis *the information set perspective*. As the modeler's information set approaches that of a firm's manager (or actuary!), a structural model is most appropriate. As the information set is reduced to that typically available to rating agencies and regulators, only reduced form models remain feasible. For the discussion at hand, the model I described would obviously be a structural model with high information requirements. The model Luke attributed to rating agencies would be a reduced form model, although these agencies have recently expressed interest in utilizing an insurer's internal structural models in their analyses. The current statutory framework has attributes of both; a myriad of contract details, invisible to the outside world, are reflected in simplified models whose parameters are calibrated to industry, rather than entity-specific, experience.

The information set perspective recasts a problem Luke discussed—an insurer attempting to boost its equity in response to a rating downgrade—in a somewhat different light. When a rating agency downgrades an insurer based upon a reduced form model and information set, the affected insurer has two options. It can adjust its internal structural model so it is judged to comport with the new rating—an act tantamount to an embarrassing

admission that a rating agency with its reduced information set somehow arrived at a better appraisal of the company's prospects than did its own management in full possession of an enormous informational advantage—or construct a logical defense of its internal model as it stands. Luke's concern was with a company electing the first option. From the information set perspective, insurance company management should be maintaining as realistic and relevant a structural model as possible, given the information at hand. It is important to note that, in a structural model such as I described, the term structures of bankruptcy and default probabilities are *calculated outputs*, not *assumed inputs*. The same holds true for their re-expression as higher yield rates that could be used for discounting promised benefits rather than benefits paid in a different structural model. The only *legitimate* way for management to bring their bankruptcy and default based structural model in synch with the rating agency's reduced form model would be to adjust its assumptions for asset and liability behavior in a manner that increases the resultant probabilities of bankruptcy and default. Doing so does *increase* the discount rates, which would, in some other model that does not allow for bankruptcy or default, equate promised benefits to the fair value of policyholder liabilities. But at the same time it would *decrease* equity in its internal structural model. This is exactly how it should be; such gamesmanship as Luke described would be both transparent and subject to deserved ridicule. Credible companies could not jump back and forth between reduced form and structural models as their outcomes suited them. I conclude that, under a thoroughly fair valuation system such as I described, the most likely outcome of an unexpected rating downgrade would be a vigorous defense by management of its internal structural model; a dialog that would eventually produce a consensus view.

And what of the common ground I promised? It seems to me that everyone should be able to agree that the *raison d'être* of insurance regulators, rating agencies, FASB and the IASB, is to protect contractual stakeholders; that unlike other stakeholders, policyholders currently lack protective covenants in their contracts; that when viewed as dynamically redefining the boundary of the regulator's option, C3P2 style minimum asset determinations can be a very efficient and effective way of creating just such



a covenant; that such boundaries increase incentives to engage in hedging activities; that such boundaries encapsulate superior information sets and consequently obviate the need to continue to spend valuable resources maintaining an informationally inferior, quasi-reduced form, statutory valuation model; that standards of absolute realism in a model should be replaced by an evaluation of a model's realism *relative* to alternative models and consistently applied to *all* models, including the current framework; that models and their associated assumptions should be judged on the degree to which they advance the interests of all stakeholders. I believe such a technical discussion would garner far more support for improved C3P2 style protective covenants, sturdily undergirded by increasingly detailed structural fair valuation models. **S**

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# Highlights of the December 2005 NAIC Life and Health Actuarial Task Force Meeting and Other NAIC Topics

by Ted Schlude



I attended the NAIC Winter Meeting held December 1-5, 2005, in Chicago, including meetings of the Life and Health Actuarial Task Force (LHATF) and selected meetings of the NAIC. Summarized here are the activities, which took place at these meetings.

## Life and Health Actuarial Task Force

The LHATF met on Thursday and Friday and discussed the following topics.

**1. C-3 Phase II – Update (AG VACARVM):** The agenda for this meeting was to first receive the Academy's comments related to AG VACARVM as well as its response to certain New York comment letters, review the most recent New York proposal and then receive comments from the ACLI including a new proposal for a simplified version of the standard scenario.

a) *Academy Comment Letter:* This letter responds to certain comments/proposals contained in two New York comment letters dated August 19 and September 22, 2005. The discussion focused on items impacting 1) the CTE Amount and 2) the standard scenario.

*Comments on Proposal that Impact CTE:* Following are several of the Academy's comments.

1) *CTE 80 vs. CTE 65:* New York proposed CTE 80 rather than CTE 65 to offset some of the aggressiveness it sees in the actuarial assumptions. The Academy pointed out that CTE 65 for reserves had already been decided by LHATF in prior meetings and also that CTE 80, which is a pretax calculation could result in no capital requirement because CTE 80 (pre-tax) would be greater than CTE 90 (after-tax) in many situations.

2) *VAGLBs vs. Non-VAGLBs:* The Academy argued that the New York proposal to separate VAGLBs from non-VAGLBs is inconsistent with general risk management aggregation principles by not allowing offsets between different types of benefits.

3) *Revenue Sharing:* New York wants a statement in AG VACARVM that recognition of revenue sharing should only be allowed if that revenue is contractually guaranteed to the insurer and its successor. The Academy feels that the language in AG VACARVM is already clear.

4) *Credibility:* New York would like to have prescribed assumptions where there is no experience or credibility. The Academy feels that the concept of Prudent Best Estimate (PBE) already addresses this issue and that focus of work prospectively should be on research, literature and studies used to support assumptions where experience is lacking, and highlighting generally accepted practice rather than on prescriptive methodology and assumptions.

*Standard Scenario Comments:* The Academy comments with respect to the Standard Scenario continue to be the same from the standpoint that there are many different runs required, which tend to defeat the purpose of the C-3 Phase II modeling process by diverting the valuation actuary's attention from

evaluating risks in the contracts using a principles-based approach, to performing mechanical exercises specified by the actuarial guideline. The Academy would prefer a simplified process for the standard scenario, serving as a benchmark for regulators' use in reviewing the reasonableness of reserves set using the principles-based approach. The Academy asked that the concept of limited aggregation be pursued and pointed out that because of the lack of aggregation in the standard scenario, reserves could be greater than the capital requirement.

- b) *New York Proposal*: New York next reviewed its most recent modifications submitted in a November 10, 2005 e-mail. Modifications included, among other things:
- Language was added indicating that reserves should “substantially cover the tails.”
  - Prudent Best Estimate was strengthened to include a margin above best estimate when full credible data is used.
  - Policyholder Behavior: When credible data is available currently but credible experience is not available in later years, a five-year grade from the assumption based on credible data to the worst optimal policyholder behavior would be required.

The Academy commented that it has not yet reviewed the modifications contained in the most recent New York proposal, but felt that assuming 100 percent adverse policyholder behavior was not reasonable.

- c) *ACLI Presentation*: LHATF heard a presentation from John Bruins of the ACLI related to AG VACARVM. The ACLI recommended adoption of the April 29, 2005 AG VACARVM exposure draft with changes as recommended in the AAA August 10, 2005 document. The ACLI is 1) opposed to extending from CTE 65 to CTE 80 as New York has proposed, 2) does not support New York's recommendation to separate VAGLBs from other guarantees and therefore not allowing hedging of different product benefits and 3) is opposed to use of the standard scenario as a floor and recommended a simplified alternative to the standard scenario in a separate proposal.

The ACLI also recommended that AG 39 not be extended to January 1, 2008, because there is no release mechanism in the accumulation of charges methodology and no provision in the reserve to recognize hedging of risks. Their feeling is that focus should be on moving forward to get a reasonable version of AG VACARVM in place by December 31, 2006, which could be adjusted as necessary going forward.

The ACLI sponsored a project aimed at alleviating reserve levels for life insurance on an interim basis prior to formal adoption of a principle-based approach to reserves.

LHATF exposed for comment the April 29, 2005 AG VACARVM, supplemented as described in the AAA August 10, 2005, document along with the ACLI standard scenario recommendation. The ACLI will begin to draft language for AG VACARVM with respect to its simplified standard scenario recommendation for LHATF to consider.

## 2. Interim Proposals Relative to New Valuation Standards from ACLI:

The ACLI sponsored a project aimed at alleviating reserve levels for life insurance on an interim basis prior to formal adoption of a principles-based approach to reserves. The interim proposal introduces preferred mortality rates by splitting the 2001 CSO Table into preferred and residual standard mortality, introduces the use of lapse rates in the calculation of reserves for UL policies with secondary guarantees, and allows non-premium-paying UL contracts with secondary guarantees to use a surrender charge as an offset to the additional reserve calculation. The ACLI proposal included a cover letter outlining the proposal, a report from Tillinghast on a Preferred Version of 2001 CSO Mortality Table, a draft model regulation implementing such a Preferred Table and a revision to AG 38 to allow use of lapse rates subject to certain constraints for UL policies with secondary guarantees. The proposal splits the 2001 CSO Table into three non-smoker and two smoker tables. For example, the 2001 NS VBT was split into super-preferred (SP-NS), preferred (P-NS) and residual standard (RS-NS) classes.

Michael Taht, who was closely involved in developing the 2001 CSO Table, provided a presentation related to the 2001 CSO Preferred Tables. Regulators also discussed a letter from New York objecting to various aspects of the ACLI proposal.

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Focus will be on a principles-based approach as defined by the Academy, which captures all material risks, benefits and guarantees including the tail risks, as well as the revenue to fund the risks.

It was noted that mortality has little impact on reserves for UL products with secondary guarantees so as a result, the proposal includes two other elements: 1) introduction of lapse rates of 2 percent (in years 1-5) and 1 percent thereafter subject to certain limitations and 2) a surrender charge offset to the additional reserve for non-premium

paying UL policies with secondary guarantees.

The ACLI asked that the Tillinghast report, the model regulation for preferred table use and the revisions to AG 38 be exposed for comment at this meeting to facilitate ongoing discussions related to the proposal. A separate independent legal review of the consistency of these changes with existing Standard Valuation laws is underway, as well.

Regulators felt uncomfortable exposing the documents given they had little time to review them, rather a February conference call will consider these documents in more detail and possibly expose them at that time.

**3. Joint SOA-AAA Project Interim Table for Preferred and Standard Mortality:** Next, LHATF received an update from the SOA, MIB and AAA on development of preferred tables by the SOA. It was noted that this project is not linked to the ACLI proposal discussed above, however, it is similar in nature in terms of its goal. The goal of this project is to have a preferred valuation table or factors for use with the 2001 CSO Table by April 15, 2007. Various teams have been formed including a data validation team, an underwriting criteria team, an experience analysis team, a valuation basic team, an implementation team and a valuation table team. The goal is to have an experience table by September 30, 2006, a valuation table by December 31, 2006 and a regulatory document by some time in 2007.

**4. Report of Academy SVL II Work Group:** Donna Claire gave a presentation related to the Academy's Risk Management and Financial Soundness Committee (also known as the SVL2 Steering Committee), its structure, as well as the subcommittees reporting to it (Capital Adequacy, Experience, Life Valuation and its work groups such as the Life Reserve Work Group, Variable Annuity Work Group and Annuity Reserve Work Group).

Focus will be on a principles-based approach as defined by the Academy, which captures all material risks, benefits and guarantees including the tail risks, as well as the revenue to fund the risks. The approach would also use risk analysis, stochastic models where appropriate, permit recognition of company experience subject to credibility and relevance constraints and provide for an appropriate level of conservatism through prudent best-estimate assumptions.

Further work will be done in all areas including peer review, format standards for reviewers and regulators, standard definitions of terms, use of judgment and the system of governance.

The ACLI noted that it has formed a committee of lawyers and actuaries to begin to put a new valuation law together for consideration by LHATF in March 2006.

Finally, New York made a motion, which was adopted, to continue pursuing its proposed valuation law changes via a small subgroup of LHATF members. The ACLI indicated that there were still significant industry concerns with the New York document.

**5. Life Reserve Work Group (formerly ULWG):** LHATF heard two presentations from the Academy related to the Life Reserve Work Group (LRWG). The first presentation by David Neve outlined an Academy proposal for a principles-based valuation standard for Life Products, which had been submitted to LHATF previously.

The Academy requested that LHATF expose this document, which includes:

- a) A draft model regulation, which outlines basic principles
- b) AG PBR, which defines prudent best estimate valuation assumptions
- c) AG DIS, which provides a documentation and disclosure framework
- d) AG MAR, which deals with margins to be reflected in assumptions

The above proposal assumes that the Standard Valuation Law has been changed to a principles-based approach and that an acceptable governance process is in place.

Additional changes to the proposal include:

- a) Scope is expanded to all life products.
- b) The mortality assumption would define an NAIC approved valuation table that best maps to the actuary's prudent best estimate assumption.
- c) A company's own interest rate generator could be used if calibration standards were met.
- d) Aggregation of policies would be allowed, but limited by a deterministic reserve.
- e) A methodology for earned and discount rates would be defined.
- f) Deterministic reserve approach is permitted provided it is demonstrated by the actuary to be sufficient.
- g) Non-guaranteed elements would change to reflect changing conditions under different scenarios in the models.
- h) Documentation and disclosure requirements are expanded in AG DIS.
- i) Other areas being considered include: separate account revenue sharing, stochastic reserve allocation to individual policies, quantification of the aggregate margin resulting from all assumptions (including disclosure) and modeling of hedges.

The goal of the Academy is to have a form for adoption by LHATF by December 2006 and to roll the new methodology out on a state-by-state basis in 2007. LHATF exposed the Academy proposal for comment.

Finally, LHATF received a second presentation from Tom Kalmbach representing the Academy related to testing performed for a twenty-year term product. Additional demonstrations will be prepared for shadow UL and accumulation UL products in the future. In the demonstration, deterministic reserves with margins were higher than current statutory reserves in early years because of the use of net level reserve methodology. Reserves in later durations of the illustration run roughly 60 percent to 80 percent of current statutory levels.

**6. A&H Working Group Meeting:** The A&H Working Group discussed the following projects:

– *LTC Annual Statement Reporting Forms:* LHATF received an Academy Report related to instruction changes and reporting forms for long-term care reporting in the annual statement. The reporting excludes accelerated benefit riders on life and annuity contracts. This is consistent with recommendations contained in an ACLI comment letter dated December 2, 2005.

The Academy recommendation was exposed for comment with a request for discussion related to actuarial certification and responsibility or ownership of the completed reporting forms.

– *Minimum Standards for Health Insurance Contracts:* The A&H Working Group continues to address issues related to incorporating recent changes on long term care reserve guidance and reflection of experience in group disability insurance claim reserves into codification.

– *Premium Deficiency Reserve Clarification:* A subgroup of regulators was formed to continue to consider whether a change in the statutory guidance is needed to clarify premium deficiency reserve calculations and methodology after receiving a proposal from Bill Weller.

– *Cancer Table Update:* Work continues on a cancer table update by the SOA. The goal is to have company data by December 31, 2005. Requests were made of 35 to 40 companies with five companies having agreed to participate at the date of this meeting. Initial data analysis is scheduled for April 2006, summaries by October and a draft report by November. Hope is that a final report and recommendation will be completed by December 2006.

– *Trends in Health Industry:* A presentation was received from Reden & Anders, Ltd. related to health care trends and analysis including recent actual trends and expectations for 2006 and 2007.

– *Individual Medical Rate Regulation:* The A&H Working Group continues to consider whether any changes can be made to the existing health insurance system to address the health claims spiral in closed medical blocks. A subgroup was formed to consider this issue further.

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**7. LHATF General Matters Meeting:** LHATF received updates on various other projects highlighted below.

– *Extension of AG 39 VAGLBs:* At the objection of various industry representatives, LHATF voted to extend the expiration of AG 39 from January 1, 2006 to January 1, 2008. As indicated previously, the industry opposes extension of AG 39 accumulation of charges methodology because it has no release from risk mechanism, nor any credit for hedges related to the VAGLB risks.

– *Independent Peer Review (C-3 Phase II):* Regulators reviewed a document prepared by Mike Boerner of Texas related to independent peer review. Discussion by LHATF focused on two levels of review: pre-release review and post-release review which might take place during a triennial exam. Mike Batte (New Mexico), the chair of LHATF, expressed a desire to have a pre-earnings release peer review as part of the process.

– *SOA Pre-need Mortality Table:* Roger Annin representing the SOA Project Oversight Group gave an update of recent progress made in development of a valuation standard for pre-need mortality products. The 2001 CSO Table is perceived as inadequate for these products, which have limited underwriting, and reverse select and ultimate mortality. A recommendation will be provided to LHATF in June 2006.

– *AG ABC:* LHATF exposed revisions to proposed AG ABC, which addresses methodology to be used in projecting benefits under CARVM in the context of the new annuity

non-forfeiture law, which allows for minimum interest guarantees to be tied to an index.

## Capital Adequacy Task Force (CADTF)

I attended several meetings of the CADTF. Highlights follow.

**1. C-3 Phase II Market Risk Question and Answer Session:** Regulators provided several presentations on C-3 Phase II as well as discussed some of the questions which have been submitted with respect to implementation of C-3 Phase II. This session was recorded and will be posted on the Academy website. Any answers to the questions will be posted on the NAIC's Web site as they become available.

Larry Bruning of Kansas will head up a results subgroup which is to evaluate the effectiveness of C-3 Phase II based on selected filings of December 31, 2005 results. Recommendations will then be made with respect to making the whole process more effective. The process will include: 1) a model dynamics review, 2) validation of model assumptions, 3) a review of margins, prudent best estimate, sensitivity analysis and 4) the impact of the Standard Scenario on results and whether it is causing any areas of concern. Areas to be reviewed included the mortality assumption (80 percent), hedge recognition and the equity return assumptions among others.

It was also noted that the RBC instructions were modified in the final version of C-3 Phase II to allow smoothing as an option. Therefore, companies with hedges can elect not to smooth so asset values and RBC calculations are consistent. It was also noted that smoothing takes place with respect to the Total Asset Requirement (TAR) so RBC may fluctuate dramatically due to fluctuations in reserves, which get subtracted from TAR for RBC determination.

**2. Life RBC Working Group:** Topics discussed by the Life RBC Working Group are highlighted here.

– *Modco Dividend Liability Issue:* The Academy said that a complete report on the treatment of the dividend liability in modco agreements will be provided at the March 2006 meeting.

– *Expansion of C-3 Phase I:* Regulators discussed a proposal by Minnesota to require C-3 Phase I for all companies subject to: 1) a \$100 million small company asset exemption and 2) that constraints of 50 percent and 200 percent of the base C-3 factors would be left in place. Blaine



Sheppard of Minnesota will work with NAIC staff to draft instructional changes for such a proposal. A conference call will be held prior to the March 2006 meeting to expose the changes. Industry representatives questioned what this change was intended to correct, having impressions that there were not any problems with C-3 Phase I as it exists today.

– *C-3 Phase III*: This project no longer refers to EIAs, but rather a broader scope project that would create a similar capital/reserve structure to C-3 Phase II for Life Products under the LRWG which would focus initially on interest rate risks on life products and then on a more complete risk review.

**3. Capital Adequacy Task Force:** Material discussed by CADTF included minutes of meetings of the various working groups reporting to CADTF as previously described. CADTF adopted minutes from prior calls and meetings which included C-3 Phase II work, adding a trend test to the P&C formula, Medicare Part D, etc.

– *Medicare Part D Factors*: Formulas and instruction changes for Medicare Part D coverage were exposed in their final form for adoption expected in March 2006. It was noted that certain changes such as the risk corridor might cause some changes in the 2007 and 2008 factors.

Work will continue in January and February related to the C-3 Phase II Results Subgroup, as well as on Medicare Part D factor refinement as necessary.

## Reinsurance Task Force

The Reinsurance Task Force continues to consider collateralization issues with respect to foreign reinsurers operating in the United States and exposed both a reinsurance collateral white paper as well as a reinsurance collateralization roundtable report. The roundtable consists of regulators, as well as U.S. and non-U.S. industry representatives. Two proposals were considered: 1) a “rating proposal” and 2) a “pooling proposal.” The rating proposal has received the most support and would involve relying on creation of a national rating system to provide rating criteria for all reinsurers participating in the market. Collateralization requirements would decrease as a reinsurer’s rating under the system increased. The Reinsurance Task Force will begin to consider both alternatives as recommended by the roundtable.

The task force also heard a presentation from the ACLI related to modernization of the Life Reinsurance Model Regulation to clarify its guidance in agreements that fall outside of pure coinsurance and YRT reinsurance or reinsure only a portion of a policy’s risks such as reinsurance of secondary guarantees, long-term care riders, variable annuity guarantees, etc. The current ad hoc approach to recognizing these types of treaties in accounting and reserving causes problems for regulators, companies and auditors reviewing the financials. The ACLI presented a Form B proposal, which would allow for incremental modernization by preserving existing guidance, but allow its application to separable benefits within a policy. This proposal was forwarded to the Emerging Accounting Issues Working Group to decide whether it warrants a new project at LHATF.

## Accounting Practices and Procedures Task Force

I attended several meetings of the working groups reporting to the Accounting Practices and Procedures Task Force. Highlights follow.

### 1. Emerging Accounting Issues Working Group (EAIWG):

It was noted that the NAIC’s Financial Summit will be held again on February 13-15 in Orlando, Florida. Also, the reinsurance model regulation Form B received from the Reinsurance Task Force was referred to LHATF for its consideration.

### 2. Statutory Accounting Principles Working Group (SAPWG):

Selected topics discussed at the Meeting Agenda are outlined here.

*Meeting Agenda:* SAPWG received an update from LHATF on its activities as they related to the accounting framework which include:

– Extension of the AG 39 sunset to January 1, 2008.

– Adoption of revisions to the MGA Model Regulation to achieve consistency with the new annuity non-forfeiture law.

The Reinsurance Task Force continues to consider collateralization issues with respect to foreign reinsurers operating in the United States and exposed both a reinsurance collateral white paper as well as a reinsurance collateralization roundtable report.


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### 2006 GRET Table

Finally, the NAIC Executive/Plenary Committee adopted the new 2006 GRET Table for use effective January 1, 2006.

\* \* \* \*

*The next NAIC meeting will be held in March 2006, in Orlando, Fla. *

- Exposure of AG ABC, which defines CARVM methodology under the new annuity non-forfeiture law.

**3. NAIC/AICPA Working Group:** The NAIC/AICPA Working Group continues to move forward with implementation of certain aspects of Sarbanes/Oxley into the NAIC Model Audit Rule. The Title IV Subgroup on management's self-assessment presented its final draft, which contains a \$500 million premium threshold by legal entity to determine which companies must comply. Title IV was adopted by the Task Force with a charge to consider potentially increasing the \$500 million threshold.

It is expected that all changes to the Model Audit Rule (Titles II, III and IV) will now be exposed and one more set of industry comment letters will be considered. A subgroup will continue to work on adoption of compliance and implementation guidelines for the revised Model Audit Rule. Interested parties will develop a timeframe for developing the implementation guide.



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### Risk Assessment Working Group

The Risk Assessment Working Group indicated that it is expected that a risk focused based approach to the financial examination will be included in the Examiner's Handbook with the 2007 release. The working group discussed transition issues where certain states might be using a risk focused rather than the traditional approach to examination during the transition, as well as accreditation issues that may come up. The working group also discussed the training program for regulators (via webcasts, Financial Summit) and coordination with other subgroups such as the Title IV subgroup revisions to the Model Audit Rule.



# 8th Bowles Symposium & Second International Longevity Risk and Capital Market Solutions Symposium

April 24, 2006  
Sheraton Hotel Chicago, Illinois

Actuaries, demographers, financial economists and industry experts will address the topic of longevity risk, who should bear this risk and the means of bearing and allocating this risk in the financial markets at this second international symposium on longevity risk and capital market solutions in Chicago, Illinois on April 24, 2006.

The preliminary program includes one day of groundbreaking presentations with more than 10 speakers from Canada, United Kingdom and the United States and participants from around the world representing countries including Canada, China, Germany, Japan, Taiwan, the United Kingdom, and the United States.

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Sponsors include The Actuarial Foundation, American Risk and Insurance Association, Pensions Institute, Society of Actuaries, Bowles Chair of Georgia State University, Edmondson-Miller Chair of Illinois State University.

For a complete list of all participating organizations, to get more information or to register, visit:  
<http://journalofriskandinsurance.org> or <http://www.pensions-institute.org>



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## *What's Outside*

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The Financial Reporting Section is sponsoring a seminar, "Requirements for Applying a Principles Based Valuation Workshop: Lessons Learned from C-3 Phase II Implementation," to be held on April 23, 2006, in Chicago, immediately preceding the Enterprise Risk Management Symposium. Watch for details on the SOA Web site.