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SmallTalk

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Report of The Continuing Requirements/ Transition Subgroup of the Valuation Law and Manual Team

Smaller companies have had concerns over the complexity of the Principles-Based Approach for reserves. To incorporate their concerns, a subgroup of the American Academy of Actuaries Valuation Law and Manual Team was created in January 2007. This subgroup gave the following report to the NAIC in March this year. It is reprinted here in its entirety.

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Continuing Requirements/Transition Subgroup

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The Principles-Based Approach (PBA) began with the work on variable annuities with secondary guarantees for Risk-Based Capital and was expanded to include reserves for universal life and



Editorial

By Jim Thompson

A syou know, we have been following the fast developments with the Principles-Based Approach (PBA) to reserves and capital. We have seen this evolve from an approach to UL to all products, however conventional. The November issue of *Small Talk* was devoted to this. In the March 2007 issue of the *Financial Reporter*, the newsletter of the Financial Reporting section, Norm Hill and I wrote an article on the update of PBA as of December. During late 2006, various smaller company actuaries and consultants raised concerns at many professional meetings. During the December NAIC meeting, not only their concerns, but also those of some regulators, reached the committees developing the PBA.

Mike Boerner, a Texas state actuary, proposed in the Valuation Law and Manual Team that a subgroup be formed to study this. In January 2007, subgroup 4 was formed and quickly named the Continuing Requirements and Transition Subgroup. Their job was to come up with practical ways of implementing PBA. Norm Hill and I, along with other actuaries, have been members of the subgroup and have been involved and quite busy for the past three months.

The proposal seemed onerous for the smaller companies; however, various industry people are pushing it along. Thus, could we come up with some way to make it acceptable to the larger and smaller companies? Could we use exemptions by product? By asset size (like the older asset adequacy analysis regulation)? Find reason for people to opt-in (no one had to use it unless they opted to use it)? Simplify it? There were many directions to go in, but we had to come up with some approach to make the PBA acceptable.

After weekly conference calls we agreed on a report that was presented to the LHATF on March 9. Norm Hill attended the meeting and made a PowerPoint presentation when the report was accepted. The report was short enough that we used it as the lead article. In his article Hill describes his experience at the March meeting.

Federal Tax Issues

The following Tuesday, March 13, I made a presentation regarding this report as part of a panel discussion at the Chicago Actuarial Association (CAA). In March the CAA puts on a mini-actuarial convention with three one–hour sessions. Registrants can sign up each hour for any of over half a dozen choices. In the hour immediately preceding the PBA panel, two prominent tax actuaries, Art Panighetti of Northwestern Mutual and Bud Friedstat of KPMG, were discussing tax issues

Small Talk

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James R. Thompson, FSA, MAAA, is the newsletter editor and is employed with Central Actuarial Associates. He can be reached at 815.459.2083 or at *jimthompson@ ameritech.net*. and the possible impact of PBA figured prominently in their session.

Tax issues are intricate. One overall impression I had was that the IRS will want one tax reserve methodology for all sized companies. Current tax law uses a prescribed interest rate and mortality table and excludes deferred premiums, excess interest and deficiency reserves. It also specifies that companies must use a prescribed valuation method (the current interpretation of CRVM or CARVM as appropriate at the date the contract was issued). If a PBA reserve is tested with current credited interest or dividends (or other non-guaranteed elements), will this create problems? Whatever the NAIC passes for a PBA, the hope is that it will fit into the current tax law without requiring a complete change in the law. This would include the current three-pronged comparison of a maximum of the net surrender value and the federally prescribed reserve, but not exceeding the statutory reserve.

Another reference for possible IRS views of PBA is an article by SOA President Ed Robbins and Peter Winslow in Taxing Times, the newsletter of the Taxation Section of the SOA. They classify the predicted possible outcomes of the presentation of a PBA approach involving stochastic reserves to the IRS into three scenarios. One is that the PBA is so different from the current CRVM that the stochastic approach will not be accepted at all. A second thought is that, because congress allowed the NAIC to determine the official reserve method, if the NAIC accepts PBA, congress will accept that if the Commissioners do. A third school of thought is that congress did not delegate unlimited power to the NAIC. Thus, the deterministic reserve in the PBA might qualify, but not any excess of the stochastic portion over the deterministic reserve.

My observation is that matters are moving quickly. I encourage everyone to tune into the discussion and not be shy about providing suggestions.

If a PBA reserve is tested with current credited interest or dividends (or other non-guaranteed elements), will this create problems?

Rest of the Issue

The rest of this issue covers other matters. One chronic issue smaller companies have faced is how to value pre-need insurance (and other simplified and guaranteed issue products). This issue concerns smaller companies more so than larger ones because some specialized in such products. The SOA has been working on a mortality study narrowed to the pre-need market. A member of the Project Oversight Group (POG), Mark Birdsall, has written an article on their progress as reported to LHATF.

The Pension Protection Act of 2006 (PPA2006) will affect product design in various ways. Will your company be able to handle the favored product ideas? See Cary Lakenbach's article.

Ted Schlude attended the NAIC meeting and has been kind enough to give us a summary of activities of interest to us. His summary is comprehensive. The meeting itself covered a lot of issues. You will appreciate the complexity of the PBA project by the number of groups reporting on their work. Note also the progress on the Capital Adequacy Task Force (CADTF). Art Aaronson has written a general article about investment management for the smaller insurance company. This is useful when one considers the importance of the investment function in insurance companies.

See Ronora Stryker's article, "What's New In Research" (printed earlier in the Product Section newsletter) and Meg Weber's article on the actuarial value ladder.

What sessions will appear at this year's annual meeting? See Leon Langlitz' article.

There is a lot going on in our profession and the pace of change is getting quicker. We hope this newsletter reaches you before the next NAIC meeting, but that is early this year, June 1 - 4. Thus you might have to check for updates on what we are writing about. \bullet

term insurance. As it was developed, the PBA approach was further expanded to include reserves for all life insurance products, with exemptions for a small number of products. Regulators and industry groups have expressed concerns over product exemptions and conversely about the complexity and expense of the PBA process as it applies to all products, even though many of those products will have minimal tail risk. It is the concern of this group that a nondiscriminating application of a PBA approach may be more expensive and complicated than is necessary or practical to compute reserves for some types of life insurance products. The cost and use of resources to perform a full, stochasticbased PBA analysis may not be necessary for products that do not have a significant tail risk.

The following are the major areas of concern:

- 1. The process to justify the exclusion from stochastic modeling is perceived to be too complex. The resources required for this process will put a strain on many companies where it may not be needed given their product mix.
- 2. The cost of an extensive and independent PBA review of a complex PBA process.
- 3. The experience reporting required for a myriad of assumptions, including mortality, lapse and policy-holder behavior may be unnecessary (or at least not necessary annually) for companies that do not have material experience.
- 4. The cost of the PBA approach may put smaller companies at a disadvantage in a way that may lead to an unlevel playing field.

Since it is a concern of some that the cumulative costs of the current PBA proposal may exceed the benefits of the approach from both a company and regulator standpoint, especially when applied to all products, we recommend that initial consideration be given to defining the various important tradeoffs of cost and benefits in a way that allows a productive estimate of their meaning to both the current or alternative options that may be developed.

This group has considered several possible approaches to simplify or modify the PBA approach for valuation. These approaches do not address all of the concerns listed above because we would like further direction and input on what approaches would be considered by LHATF and the LRWG. We have considered several approaches and have classified them into three types: 1. Suggestion to phase in the LRWG requirements

A phase-in approach would be to consider initial adoption of PBA for more complex products only (e.g., Variable, UL with long term secondary guarantees) and delayed adoption or temporary exemption from all or parts of the PBA process for other products with less tail risk. A phased-in approach would allow actuaries and regulators to gain experience and a familiarity with the new PBA process based on a limited set of products and then a decision can be made through the valuation manual on whether an extension to products with less tail risk is necessary or desirable or whether simplified methods should be considered. Definitions of these products based on the risks of the product would be required. Extensive use of certain types of investments (e.g., equities, options) may also require stochastic testing. This may require a better definition of significant tail risk. It may be desirable to require an actuarial opinion to specify that no embedded options have been included in the product design that would classify the product as one of the types requiring testing.

- 2. Changes suggested to the proposed LRWG requirements to satisfy the concerns listed above.
 - a. Start with the presumption that reserves ought to be deterministic and computed policy by policy. Develop a test to determine if stochastic work is required. If the product fails the test, reserves are computed using the LRWG requirements. If it passes, the deterministic method is used. The restatement to put deterministic first may meet two purposes: A contract by contract methodology may fit better in the current tax law (while also raising other issues) because there is one underlying basis for the reserve and the reordering more clearly makes the point that the PBA requirements are not mandating stochastic testing for all products.
 - b. PBA as currently designed with the following changes: A simplified exclusion test which, if satisfied, would allow the use of a Deterministic Reserve and a simplified approach to setting Prudent Best Estimate assumptions. For companies with products that qualify, this would simplify the cost of modeling and the cost of any independent PBR review required. We are currently working with the LRWG to identify areas that can be simplified and still retain the PBA principles.

- Development of simplified methods that are outside of the current LRWG approach for some or all products:
 - a. One idea is to require an initial actuarial opinion that would cover all products. The actuary would classify the reserve approach needed for a product as either (1) current formulaic approach (net premium reserves), (2) deterministic gross premium reserves, or (3) the current LRWG draft proposal. This opinion would be fixed and would require justification for the classification, based on scenario testing and risk profiles present in the products. Future valuations would correspond to the classifications above. A change of method would require approval by the commissioner. The rationale supporting the initial opinion would be monitored on a periodic basis, and any material changes may require the redetermination of the appropriate reserve methodology.
 - b. Another approach would calculate a gross premium reserve under anticipated experience assumptions using a seriatim, deterministic approach. A provision for risk is added, which would need to be determined before this approach could be adopted, agreed to by regulators and specified in the valuation manual. For contracts with non-guaranteed elements, the approach is simplified further by use of a "valuation basis underlying guarantees." This is a set of gross premium valuation assumptions under which, at issue, the present value of premiums equals the present value of guaranteed benefits and expenses. Normally, the assumptions in this valuation basis will be conservative. This valuation basis is locked and used to value future guarantees (excluding non-guaranteed elements) on each future valuation date, subject to a simple adequacy test of valuing the guarantees under current assumptions. Secondary guarantees would be included as guarantees under this approach

For contracts with non-guaranteed elements, the approach is simplified further by use of a "valuation basis underlying guarantees."

c. Finally, a simplified approach couldcalculate a deterministic reserve as in the current PBR requirements, but with the seriatim reserve based on option b. above. Use an NAIC rate for interest and a CSO table chosen by an underwriting scoring test. The stochastic exclusion test would be a cash flow test with predefined extreme scenarios set by a regulatory body, such as the Centralized Examination Resource Office, each year. The predefined extreme scenarios could vary by product. The use of this test may be deemed by the regulatory body to be inappropriate for some products, in which case the stochastic exclusion tests in the current LRWG draft would be required. Any deficiency means the test is failed and the stochastic reserve is computed as in the PBR model. If no deficiency, the recalculated deterministic reserve is computed using the greatest present value of accumulated deficiencies (GPVAD).

Subgroup 4 will continue to work with the LRWG on the approaches outlined in this report. A combination of these approaches may be considered as well, such as initial product exemptions where the number of product exemptions are reduced based on additional flexibility provided in the LRWG. Any input LHATF can provide to help focus the efforts is welcome.

We support the direction of the Valuation Manual to handle new approaches as products, methods, and techniques evolve which will enable this manual to handle the options provided in this report. \bullet

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Update for Principles-Based Reserves at NAIC/ LHATF Spring Meeting, New York, March 9 - 10, 2007

By Norman E. Hill

spokesman for the LRWG and I gave our Academy presentations. I spoke on behalf of Subgroup 4 of the Valuation Team.

One regulator asked me a question about reinsurance under PBR. I said our subgroup really hadn't discussed the matter much. However, I personally believed that reinsurers would be more particular about the type of reserves and the documentation provided them. There would be a learning period, involving some pain, until everyone was comfortable.

With hindsight, I would also have added that with the need for industry assumptions in setting reserves, reinsurers could perform valuable service for their clients. Due to credibility requirements, small companies would likely not be able to use their own experience in setting assumptions, or only to a limited extent. With a broader base, the experience of reinsurers might serve as a quasi-industry base for mortality, lapse and related reserve assumptions.

I mentioned our FIT discussions and the possibility that the Code would not necessarily preclude options, i.e., differences among companies for the same product, as to methodology. However, an ACLI spokesman made one significant audience comment. He said that, regardless of this wording, Treasury would undoubtedly zero in on requiring the lowest reserve among any options. If so, this would make it very important that we contest any general notion that stochastic reserves are the lowest. If this belief became prevalent, it could mean that everyone would have to test stochastic reserves for FIT. Obviously, this would represent a very negative result for small companies.



Afterwards, I thought to myself that wording for "deterministic" reserves could properly be broad enough as an umbrella to include the "stochastic" version.

I believe that PBR suffered several setbacks during the LHATF meeting, although not fatal ones. Also, it was clear that key procedural issues are still unresolved.

First, I thought it had been settled that the company would hire the PBA reviewing actuary. However, several regulators as well as a consumer representative said that the insurance departments should do the hiring. One reason was that some state laws might not be broad enough to allow forms of delegation of Insurance Commissioner's powers. In other words, a PBA review opinion from a company appointee might not suffice as a replacement for Department appointee opinions. Double work and billing would thus be required.

One prominent regulator seemed to have a generally negative attitude about PBR. He argued the following:

 For variable products, apparently for reserves under either PBR or VACARVM, dynamic hedging "will not work." (However, I believe the assumption of dynamic hedging is very important to those writers.)

- PBR should only be in addition to the current formulaic structure.
- The 2nd reserve floor, a reserve with risk free interest (net or gross premiums, although still unspecified) should be tested cell on cell, not aggregate. Presumably, FIT currently requires a cell by cell test. A double application of cell by cell tests would make reserve calculations much more complex.

However, one other step was discussed, which could wind up positive for PBR and the industry in general. The LHATF staff person urged that a joint committee of LHATF and Life Capital Adequacy be formed to keep both methodologies consistent. As I indicated elsewhere, the current risk-based capital proposal from the Academy (on C3, Phase 3) has glaring inconsistencies with current tendencies for PBR. There was talk of South Carolina being Chairman, since the state is represented on both NAIC groups. This might make it easier to discuss PBR and RBC together. I don't think this new committee is set up yet, pending the Capital Adequacy Task Force's concurrence.

Related Matters

The NAIC's Capital Adequacy Task Force met on Sunday. There was no separate meeting of the Life RBC subgroup, which would have meant further discussion of the Academy's RBC C3 Phase III proposal. However, they will be holding several conference calls this month.

On Friday, a preliminary Academy presentation on PBR for long-term care was made to LHATF. It was structured as a series of questions for regulators, rather than a specific proposal.

Small companies in several cases have small blocks of LTC. Even on a preliminary basis, it seemed clear to me that several contentious regulatory issues could arise for this product.

For example, one regulator objected strongly to any inclusion of future rate increases in setting assumptions for PBR reserves. One industry spokesman replied that a distribution of test scenarios for reserves would naturally include some with less favorable experience. For guaranteed renewable policies, sound company management would require reliance on rate increases in such unfavorable scenarios.

Although it was not discussed, the question of future improvement in morbidity could also become controversial. LHATF had previously precluded such improvement in formulaic statutory reserve assumptions. However, it is frequently used in pricing and reserve testing.

The question of "moderately adverse experience" was also discussed. LHATF pointed out that the Academy had previously declined to issue specific guidelines as to what constitutes moderately adverse. One regulator stated that he has seen rate filings with only 1 percent variance defined as "moderately adverse." In truth, this term may need tighter definitions, as it is likely to be used in describing PBR assumptions.

Another regulator stated that long-term care reserves under PBR should be twice as high as current levels. Actually, only new issues would be covered under PBR. PBR reserves for new issues would not be expected to differ significantly from current formulaic reserves that are based on comparable or the same assumptions.

Newest Alternative

A member of our Valuation Manual Team has proposed a slight variation of the deterministic gross premium reserve/cash value floor method. This method would be optional, in lieu of using the LRWG methods. For policies not subject to Material Tail Risk, deterministic GPR's may include assumptions deemed by regulators to be appropriate (such as interest and mortality) or determined by a simplified process approved by regulators.

An attempt is made to define Material Tail Risk, albeit indirectly. A policy is deemed not subject to this risk if it can "pass" cash flow tests with certain prescribed scenarios, again, set by regulators. Presumably, these present values of cash flows would have to be at least equal to formulaic reserves.

This proposal deserves further study. Key questions that must be resolved include:

- 1. Are the prescribed scenarios practical for small companies?
- 2. Are there alternative ways to determine a successful cash flow test that would confirm that the policy is not subject to Material Tail Risk?

If a policy is deemed subject to Material Tail Risk, it would have to be reserved under the LRWG methods, meaning stochastic reserves including tests for the greatest value of accumulated deficiencies.

Conclusion

Resolution of critical matters under PBR for small companies and for the industry in general has a long way to go. Especially for small companies, several alternative reserve methods are still on the table. At the same time, resolution of RBC and needed consistency with PBR are still highly unresolved. This means that small companies need to remain watchful for a threefold area of ongoing proposals:

- 1. PBR reserves
- 2. RBC C3 Phase III
- 3. Federal Income Tax ●



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Investment Management for a Smaller Insurance Company

By Arthur Aaronson

Anaging the investment portfolio of an insurance company is a challenge in today's competitive marketplace with the increased focus by both regulators and rating agencies on the companies' operational metrics and product pricing. The goal of management is to define its asset portfolio in order to back the company's unique liability mix, while adhering to its risk profile and incorporating current market conditions and operating needs into this analysis. The first step in this process is developing an effective set of investment guidelines for the company to follow.

In the smaller insurance company environment adopting an overall goal of managing the investment assets to provide the company with cash flows that meet expected liability needs is critical to the organization's growth. This concept of Asset/Liability Management is a discipline with widespread acceptance throughout the insurance industry. The 2005 Society of Actuaries exposure draft, Principles Underlying Asset/Liability Management, addresses the widely accepted concept of Asset/Liability Management (ALM) as "the ongoing process of formulating, implementing, monitoring and revising strategies related to assets and liabilities to achieve financial objectives, for a given set of risk tolerances and constraints." Applying the principles of ALM will vary from entity to entity, but the concept will often allow management to identify and manage the risks within their portfolios and help achieve desired returns or appropriate portfolio structure to contribute to the organization's growth and stability.

Managing an investment portfolio under an ALM process requires commitment from management to help establish investment policy that will deliver satisfactory investment while not subjecting the organization to undue risk. Investment guidelines and the specific con-



straints and risk profile contained within become the foundation for that investment policy.

When designing investment guidelines under an ALM mandate, it is important to consider the company's liability structures in addition to its risk appetite. The liability structure is best represented by the expected liability cash flows of the company for policies issued or assumed by the entity. The key word here is "expected," since cash flows seldom unfold exactly as projected. However, management must make realistic assumptions in order to allow for appropriate portfolio design. The selection of permitted asset classes and duration is dependent on understanding both the structure of the liabilities and the candidate asset classes. In today's investment marketplace, expertise in managing those various asset classes is readily available either in-house or through external managers. The process of defining what is permitted should be aligned with management's understanding of the asset classes in the context of the company's unique liability characteristics.

Investment managers will work with your company to understand the multitude of investment securities available, but it is important that management remain vigilant in understanding the risks associated with each of these securities in all market environments. The lack of comprehension of an asset class can lead to future pitfalls if the performance of a selected asset class deviates from its desired objectives and an investment process to manage for such deviation is not in place.

Risk is also unique to every entity. It is defined, by Webster's, as "the chance of injury, damage, or loss." Risk is subject not only to specific company management appetite, but also to management's understanding of the total enterprise's operations. Risk includes duration exposure, quality, diversity, size, liquidity and credit among others. Management must understand its limits-both regulatory and operational-in order to allow optimal guideline rules that do not overly inhibit portfolio returns, or allow the portfolio to expose the company to unnecessary risk. As an example, an investor can purchase Commercial Mortgage-Backed Securities (CMBS) at the AAA, AA and single-A level. However, the pickup in spread in current market conditions, and thus income, between the higher quality paper and lower quality paper may not be sufficiently incremental in current market conditions to warrant the additional exposure to risk (liquidity or default) that the lower quality issues contain.

Once drafted, guidelines should be tested to determine if they will allow the portfolio to be invested in asset classes that can deliver a diversified portfolio to support the company's ALM needs, while managing the portfolio in a disciplined, but flexible manner. Management must also exercise common sense, and a recognition of changing market dynamics, in allowing for asset classes to be in-

cluded in guidelines, but restricting asset class investments when conditions warrant. As an example, current credit metrics and issuance indicate potential signs of stress in many sectors. In such market conditions, exposure to lower quality credits, like high yield corporates, needs to be supported by strong credit research to manage such exposure. Alternatively, when such diligence is not available, it may be prudent to avoid the sector.

A company's guidelines should allow management the ability to enhance an entity's income, cash flow or tax needs while remaining consistent with its ALM metrics, if needed. The use of flexible constraints that allow management to alter the portfolio structure, recognizing both changing market conditions and the company's dynamic liability exposures, will generally enhance the ability of the portfolio to deliver more consistent, positive investment results.

In summary, developing investment guidelines allows companies' investment professionals and actuaries to create a portfolio roadmap that includes an assessment of investment classes available to the insurance company and metrics to measure the investment portfolio's risk. When done within a framework that supports a disciplined ALM process, the portfolio will reward the company with effective investment management, in different market cycles, whether they be investment or insurance related. ●

A company's guidelines should allow management the ability to enhance an entity's income, cash flow or tax needs while remaining consistent with its ALM metrics, if needed.

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Pre-Need Mortality Study

By Mark Birdsall

fter over two years of work, the SOA Project Oversight Group (POG), working in connection with the Deloitte-UConn Actuarial Center, has produced a set of basic mortality tables for preneed life insurance business. This article describes some of the background of the study, as well as certain results.

In July, 2004, Jim Van Elsen sent a letter to Leslie Jones of the South Carolina Department of Insurance requesting that the NAIC's Life & Health Actuarial Task Force (LHATF) add an item to its 2005 charges to develop and adopt a new mortality table for pre-need life insurance that could be used for both valuation and nonforfeiture calculations. Jim Van Elsen explained that the unique characteristics of pre-need life insurance make the use of the 2001 CSO table inappropriate for use with pre-need business.

LHATF responded positively to his request, and later in 2004 a Project Oversight Group was organized to begin work on the project. In order to ensure confidentiality and security of the data and to perform the data analysis and calculations in connection with this study, the Deloitte-UConn Actuarial Center, with Jay Vadiveloo as Deloitte's project leader, was selected to work with the POG.

In defining the scope of the project, the POG decided to focus only on the mortality aspects of pre-need life insurance and not other facets, such as benefit growth rates or policy persistency. Other forms of simplified underwriting business were excluded from the study, such as final expense policies. The working definition of pre-need life insurance that the POG used was as follows:

"Pre-need insurance is unique in that it is only sold in the situation where there is a formal contract in place with a funeral home. The pre-



need policy serves to fund the contract with the funeral home."

The POG needed to decide how to handle the situation in which trust account assets had been transferred into a pre-need life insurance contract. For several different reasons, the POG decided to exclude this business from the study if a contributing company could identify those policies.

As is typical for Society of Actuaries mortality studies, experience was also excluded for those policies on nonforfeiture options, such as extended term in-surance or reduced paid-up.

The POG decided to perform the study based on count, rather than units of insurance or face amount. This is partly due to the fact that the range of policy sizes is comparatively small for pre-need business. There was also some con-



- Pre-need mortality rates exceed 80 CSO rates for five durations and gets lower than 80 CSO in later durations.
- Impact of first year anti-selection extends for six durations from issue.

cern that since many pre-need plans have non-level death benefits, some inconsistencies in reporting might affect the study results.

And so, the data request went out, asking for pre-need policy data for calendar years 2000 to 2004. Data contributors were asked to provide

policy data that included issue age, gender, policy duration, policy payment type (whether single pay or multipay), and underwriting category, among other data items. Contributing companies were asked to review their data as of June 1, 2005, or later, in order to catch late-reported claims. Early payoff policies were combined with the multi-pay experience, even when occurring during the first policy year. All policies were assigned to one of three underwriting categories:

- Aggregate—any policy whose rates and benefits did not depend on the answers to any health questions. In other words, the company only offered one underwriting class for that plan.
- 2. **Standard**—any policy whose rates or benefits were less favorable because of answers to health questions.
- Select—any policy whose rates or benefits were more favorable.

Ultimately, 10 companies contributed data to the study. Each company's data was validated for accuracy and



In aggregating the results, exposures were scaled so that the total study results reasonably represented all the contributing companies.

consistency by working with the company to confirm the level and pattern of mortality. In aggregating the results, exposures were scaled so that the total study results reasonably represented all the contributing companies.

In total, the study was based on over 150,000 deaths. Only 1 percent of these deaths occurred on policies with an issue age less than 50.29 percent of the deaths occurred on policies with issue ages greater than 85. 63 percent of the exposures were on female lives. Above issue age 85, female lives comprised 76 percent of the exposure.

The great majority of the data fell within the aggregate and standard underwriting categories, which consistently exhibited a reverse select and ultimate pattern for both male and female lives. Please see Table 1 on page 10. (Tables 1, 2 and 3 are all extracted from Vadiveloo's March LHATF presentation. Male mortality experience follows a similar pattern to the female experience shown.) Note that the anti-selection period appears to persist for about five or six years.



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The Pension Protection Act and Its Implications

By Cary Lakenbach

The focus of this discussion is the critical impact that the PPA has on the sale of what many refer to as combination or integrated products. The combinations are generally Life Insurance plus a Long-Term Care (LTC) feature, and Annuities plus a Long-Term Care feature.

For such products the PPA builds on existing law. The Health Insurance Portability and Accountability Act, fondly known as HIPAA, became law in 1996, is the key foundation for combination products. Consequently, any discussion of the key provisions of the PPA should begin with a review of this law.

HIPAA

Life and LTC combinations have been available for some 20 years, well pre-dating the Heath Insurance Portability and Accountability Act of 1996. HIPAA gave official Internal Revenue Code recognition to certain long-term contracts, either if standalone or in a life and LTC combination, by establishing a new code section, Section 7702B, to define the conditions under which an LTC contract or LTC provisions of a contract could be considered qualified long-term care insurance. If the LTC contract met the requirements to be qualified (in this sense), it would be considered Accident and Health Insurance and consequent benefit payments would be received income-tax free under the law. (There are many places in the Internal Revenue Code where the term "qualified" occurs. Here we refer to the definition of qualified long-term care insurance under Section 7702B(b)(1).) One should observe the law does not give a blanket incometax free ride to any and all payments. There is more devil in the details than that.

Life and LTC combinations generally accelerate a portion of a life contract death benefit each month, or period, while the insured is chronically ill. Typically, the percentage is 2 percent or 4 percent of the death benefit, payable each month while the insured is chronically ill. When the benefit payments are made, the remaining death benefit of the life contract is reduced dol-



lar-for-dollar, and other policy amounts such as account value, loans and premiums, are reduced proportionally. (One complex area where proportionality does not reign, although logically it makes sense, is the calculation of guideline premiums. Such calculations are driven by Section 7702's attained age decrement rules.)

So, as noted, such benefit payments escape tax in properly structured contracts. In so-called reimbursement contracts, where the amount of claim dictates the amount of benefits, subject to specific policy maximums, all benefit payments are received income-tax free. The law also allows per diem contracts, those in which a payment is made independent of the amount of qualified long-term care services provided, to be received income-tax free as long as the payments do not exceed specified thresholds, which change year to year depending upon changes in the cost of living. For 2007, the limit is \$260 a day. (An aggregation rule applies to individuals who own both per diem and reimbursement contracts, the net effect of which may be to limit the amount of the per diem limitation.)

HIPAA addresses the tax treatment of charges made against the cash value of a life contract to pay for long-term care charges.

For starters, QLTCI contracts or policy (or rider) provisions are treated as separate contracts, and as a consequence deductions against the life policy's cash value are treated as distributions from the life contract. If the life policy were a Modified Endowment (MEC), such as would be the case with a single premium life contract, distributions would be taxed on a LIFO (Last-In-First-Out) basis, so that taxes would arise if there is any gain in the contract. If the contract is a non-MEC, taxes arise on distributions if the investment in the contract is at zero, as might occur, if the policyholder had withdrawn all premiums paid as part of a program to utilize the assets of the life contract to supplement retirement income. Smaller companies, like all insurers, need to recognize the possible tax consequence and be prepared to send 1099s as required.

As HIPAA is silent about the categorization of long-term care as a qualified additional benefit (QAB), it is therefore *not* a QAB under Section 7702(f)(5). Consequently, one cannot reflect the prefunding of the LTC charges in guideline calculations. This consideration somewhat limits the accumulation efficiency of the single premium contract to which the LTC is attached.

Finally, it is worth noting that HIPAA is completely silent about annuity and long-term care combinations.

Product Story—Since HIPAA

Several insurers had already been offering integrated life and LTC combinations when HIPAA became law. At the time of enactment, and for several years thereafter, there certainly was controversy as to whether a qualified, as opposed to non-qualified, LTC insurance contract was desirable. That race has been won by the QLTCI of-

fering. Offering a non-qualified LTC will at a minimum run into competitive challenges constantly.

Several insurers have been spectacularly successful with their combined offerings. One has over \$3 billion in force. Interestingly enough, discussions with key associates indicate that there were many stops and starts, wrong turns and blind alleys, before a successful strategy came into focus.

The following considerations are viewed by many as critical (not necessarily all at the same time and in the same product):

- In the life-LTC vehicle, a benefit is always paid, so the objection to standalone vehicles, that they are "use it or lose it," is overcome.
- 2. Key Markets:
 - a. Over 50.
 - b. Males and females.
 - c. Income over \$75-100,000.
- Sale combines legacy aspects (life insurance) with longterm care protection.
- Sale is often considered as a critical part of an asset allocation strategy, in which part of a client's relatively riskfree assets are redeployed into the combined offering.
 - a. This focus, on asset allocation strategy first, rather than on LTC first, has led to major penetration and success with regional brokerage houses and wirehouses.
 - b. This sale has been (largely) single premium.
- 5. An integral part of the aforementioned asset allocation strategy is a return of premium rider that assures the policyholder will always at least get back his deposit.

Most of the successful offerings have been non-variable, and there is worthwhile market penetration with both whole life and universal life structures.

A prominent, very large Midwestern life insurer has been very successful recently in offering an LTC acceleration rider with variable universal life. A significant percentage of purchasers are purchasing the rider.

A more modestly sized Midwestern insurer has seen considerable success in offering LTC acceleration with its par single premium whole life plan, and an Eastern insurer offers an entire permanent and UL portfolio with LTC acceleration riders. There were a few attempts at developing annuity and LTC combinations, and their success was extremely limited at best, no doubt due to the absence of favorable tax treatment in the law (HIPAA.)

Pension Protection Act

The Pension Protection Act's stated effective date is Jan. 1, 2010. This would suggest companies have some time to prepare for the changes in law. In our view, the appropriate answer is quite the contrary, because intensive examination suggests attractive product and market options are available for designs in the transitional period 2007 to 2009.

The PPA, most importantly, expands the definition of qualified long-term care insurance contracts to include those attached to annuities. This new provision effectively means that annuity assets can be used to fund the long-term care features of a contract on a basis consistent with those of other assets. That is, prior to the change, the typical annuity and long-term care combination, such as it was, provided for enhancements to the annuity cash value, and when such values were distributed, they were taxed no differently than any other distribution from an annuity account value.

Under PPA, then, appropriately structured qualified long-term insurance contracts that are riders to an annuity will provide (long-term care) benefit payments to annuitants on an income-tax free basis. (We'll keep referring to riders, but the law grants the same treatment to long-term care provisions of an annuity contract, if they meet the requirements to be a qualified long-term care insurance contract.) The law specifically states that annuities contained in tax-qualified retirement offerings (e.g., 403(b)) are not covered by the aforementioned changes.

This opens up all sorts of opportunities given the significant dollars resident in in-force annuities as well as the opportunities for new sales. We'll come back to this later, but *the key observation is that potentially the entire annuity is payable to a chronically ill individual without any tax consequence.*

Furthermore, the law states that any distribution, from either an annuity or life contract account value, which is used to pay for charges for coverage under *qualified* longterm care insurance, will not result in taxable income to the policyholder. The law states that any such distributions are first used to reduce the investments (basis) in the contract to zero, but even when that happens, additional charges are treated specially by not being taxed, *even though they come out of contract gain*.

Readers will find this provision rather unusual. For starters, in annuities and modified endowments, the usual

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"exit strategy" for distributions is that they come out of gain first. So, here, the effective order is reversed. Further, should the basis reduce to zero, the law consequently allows gain to escape taxation in this special circumstance. Clearly, someone wanted to encourage the sale of such contracts.

There are several other important provisions of the Act worthy of note.

The first has to do with the treatment of exchanges. Effective after 2009, the law specifically includes qualified long-term contracts or life or annuity contracts containing qualified long-term care insurance riders (or provisions) as being contracts to which, or from which, (income-tax free) Section 1035 exchanges can be made.

Specifically, the revised Section 1035 says:

- 1. An annuity contract can include a qualified long-term care insurance contract for purposes of Section 1035.
- A life contract can include a qualified long-term care insurance contract for purposes of Section 1035.
- 3. A life contract can now be exchanged for a qualified long-term care insurance contract, an annuity, endowment, or another life contract (which may contain a qualified LTC insurance provision.) Note the contract being exchanged might also contain such an LTC provision.
- 4. An annuity contract can now be exchanged for a qualified long-term care insurance contract, or an annuity or endowment contract (which may contain a qualified LTC insurance provision.) Note the contract being exchanged might also contain such an LTC provision.

Beginning in 2010 another provision of the law requires insurers to report the amount of all charges made against the cash value of an annuity contract or the cash surrender value of a life insurance contract to cover qualified long-term care insurance charges. (The purpose is clear—to create a roadmap of the charges that escape income taxation.)

So how does the government plan to pay for this liberalization? The law specifically impacts annuity and LTC sales by requiring that the DAC tax percentage for such business be 7.7 percent instead of 1.75 percent for other annuities effective after 2009.

This approach certainly makes sense. Otherwise (if the DAC stayed at 1.75 percent) the law would have given an unusual advantage to the combined product over the sale of a separate annuity and the use of its funds to fund a standalone contract.

In this context it is worth mentioning that the law only

addresses combination annuity and LTC products. It would appear that a distribution from an annuity to pay premiums for a standalone LTC contract would be taxable under the prevailing LIFO rules for annuity distributions.

High Level Implications of the Law

Many questions arise as to the impact of the law. Here are a few, along with some observations.

1. What is the likely impact of the higher DAC cost on annuity and long-term care combinations?

Our initial calculations suggest that the cost may be in the neighborhood of 25 points of spread, assuming the spread is charged over the 11-year period in which the higher first year cost is amortized. Such a cost is not inconsequential, especially in light of today's low interest rate environment.

2. What happens in the next three years? Intensive study suggests that it may be possible to write annuity and LTC combinations within the next three years and do so with a 1.75 percent DAC. Consequently the next three years may present a major opportunity rather than the conventional view of a long holding pattern.

Several designs come to mind that optimize the value of the package while minimizing the cost.

Designs will have to be true to distributor circumstances, in that packaging annuities and long-term care must address the sales process reality. Said another way, if the annuity representative is one who sells annuities much the way mutual funds and similar instruments are sold, don't expect such reps to agree to underwriting of the LTC risk. Folks, it generally won't happen. Creative design and non-intrusive rapid underwriting alternatives will have the primary role.

3. What impact does the law have on existing business?

The new law will apply to business previously written under HIPAA, so that companies will have to modify systems for such business. The changes will need to be effective beginning Jan. 1, 2010.

4. What impact does the PPA have on immediate annuities?

A review of the law and intensive analyses with other knowledgeable parties suggest that the favorable provisions of the PPA may well apply to immediate annuities that contain qualified long-term care components. Specifically, the favorable tax treatment of benefits may apply to payments under properly structured immediate annuities.

The law ought to be a major impetus to the immediate annuity business, as it enables significant flexibility in the amount of the payment as circumstances warrant, in fact demand, flexibility.

Small Company Considerations

We know from focus groups that individuals in the pre-retirement to recently retired years are bewildered by the financial decisions they need to address around retirement. They recognize they have one bucket of financial assets, but multiple needs to address with that one bucket. How do they allocate their funds wisely?

It is logical, although by no means pre-ordained, that a product that addresses two or more concerns at the same time will get a favorable hearing. So life and LTC combinations, deferred annuity and LTC combinations, and immediate annuity and LTC combinations, all potentially fill a real need, and the sound designs may well turn out to be successful.

These vehicles offer a smaller insurer the opportunity to participate more fully in markets that address the needs of near retirees and retirees, a market that is growing immensely.

Here are a few observations to keep in mind:

1. Life Issues—Keeping the design relatively simple will not necessarily put you at a disad-vantage against standalone LTC offerings.

Addressing administrative issues to minimize complexity and identify workable solutions is critical. Consider doing a feasibility study to address administrative issues, including interaction with claims units. In fact, a feasibility study should address the whole range of issues that a company will need to address. Such a feasibility study should develop sufficient information to allow senior management to make a knowledgeable, measured go/no-go decision whether to proceed with development.

Here are some additional considerations:

- a. A per diem approach is easy to understand and much easier to administer.
- b. On the life side, limiting the acceleration options to one or two percentages should be more than adequate.

- c. An inflation feature would be desirable during the acceleration phase. Such a feature would address what would otherwise be comparison shortfalls with the standalones.
- d. An extended benefit rider that pays out LTC benefits should the life policy be fully accelerated is attractive.
- e. A residual term element that promises there will always be a minimum death benefit to pay final expenses is attractive.
- f. Consider limiting underwriting to one standard class (or at least very few.) One does not need the range of classes available on life products.
- g. If your company does not offer LTC already, consider working with an external vendor to provide claims review, both at time of initial claim and at periodic review. There is no need to build a relatively high fixed-cost claims unit.
- h. Making sure the policy values are appropriately adjusted for acceleration, including tax-related items such as guidelines, is critical. Quality actuarial specifications provide needed precision and minimize, if not eliminate, costly redo's.
- 2. Deferred Annuity Issues—Simplicity reigns here as well. A feasibility study is equally critical.
 - a. Per diem approach.
 - b. The LTC amount should be structured in terms of a benefit base. One approach is to have an increasing benefit base, starting from a negligible level. This minimizes underwriting need and initial anti-selection concerns. Another approach might have a more level benefit base. In either case, but especially in the latter, one might want to consider a no-benefit period of x years (e.g., x is three or five or ...) (Of course, care must be exercised that the structure complies with the PPA.)
 - c. A further note on the benefit base: It is possible to control the net amount of LTC risk by careful structuring of the

benefit base. This may be particularly important to smaller entrants.

- d. Underwriting should be limited. A key would be to screen for cognitive impairment in a rapid yet effective manner.
- e. Surely consider the use of an outside vendor here if you don't offer standalone LTC.
- 3. Immediate Annuity Issues
 - a. Per diem approach.
 - b. As an example, the LTC benefit base would be the sum of the (usual) annuity payment plus an additional payment, and would be payable for x years. (x could conceivably be for life, but could be two, three or five years, more typically.)
 - c. Care will be required to deal with exclusion ratios properly.
 - d. The LTC contingency acts at cross purposes to the longetivity risk. This may limit the underwriting need.
 - e. Outside vendor for claims.

In conclusion, the confluence of market need resulting from the aging of America and the changes in tax law due to the Pension Protection Act have created major opportunities for insurers of all sizes to address the needs of their customers.

Smaller Insurance Company Section to Sponsor Four Sessions at Annual Meeting

By Leon L. Langlitz

he Smaller Insurance Company Section will sponsor four sessions at the 2007 SOA Annual Meeting to be held at the Marriott Wardman Park Hotel in Washington, D.C. on October 14-17, 2007. The tentative schedule includes the following sessions.

The Future of Smaller Insurance Companies

The first session will be a general session on the future of smaller insurance companies. Come hear the presenters as they gaze into their crystal balls and relate what they believe are the defining influences for smaller insurance companies today. Who will survive the next 10 years? How will they do it? What needs to be done now to ensure long-term survival of smaller insurance companies?

Intercompany Expense Study

Your section is jointly sponsoring a session on the Intercompany Expense Study with the Product Development Section. This session will provide a forum for current and prospective contributors, as well as users of the studies, to share information, voice their opinions and make recommendations for future work. This annual study has provided useful expense information to companies for the last five years. The SOA Company Life Insurance Company Expense Committee is also responsible for the annual development of the GRET table. Discussion regarding how these two efforts are interrelated is expected. Exchanges on how they might be used to support Principal Based Reserving for product development purposes is also anticipated.

Enterprise Risk Management

Enterprise Risk Management is a current hot topic. How can the smaller company develop the necessary tools and strategies that will benefit



them from incorporating risk management strategies? Come hear how smaller insurance companies are incorporating these ideas into their operations.

Anything Goes!

And finally, we'll host our popular session where you can discuss with your peers some of the current issues that smaller insurance companies uniquely face. Some of the topics include the latest on principal based reserving, reasonable reinsurance access and how the new preferred mortality and 2001 CSO tables will affect product development during the near term.

In addition to these four sessions, the section will be hosting a hot breakfast on Tuesday, Oct. 16. Attendees will have an opportunity to network and enjoy a hot breakfast in an informal and casual atmosphere. A short presentation on the Section Council activities of the past year will be provided along with the introduction of new Section Council members. There will be time for attendees to voice their concerns and issues to council members to help direct section activities over the course of the following year.

There are openings for speakers and moderators for many of the sessions. If anyone has an interest in speaking at the meeting they can reach me at my e-mail address.

Hope to see you in Washington, D.C. in the fall. \bullet



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Actuarial Value Ladder: Insurance Market Model

By Meg Weber

t the 2006 SOA Annual Meeting, the first prototype of the Actuarial Value Ladder was shared with the members of our profession. The concepts of this professional development tool are being incorporated in our 2007 Spring and Annual Meetings to assist attendees planning their sessions.

The Actuarial Value Ladder is a project of the SOA Marketplace Relevance Strategic Action Team (MRSAT) led by Chair Dan McCarthy. This career path tool articulates the value of the contribution actuaries can make and the competencies required across a full range of professional roles. As it matures, the Value Ladder becomes a powerful means to communicate with employers on the importance of the profession, as well as a way to assist actuaries in self assessment and developmental plans.

Each session at the SOA meetings is aligned to a specific stage on the Value Ladder. As meeting attendees register, they can develop a "conference curriculum" that matches where they are in their careers and where they aspire to be. The Value Ladder identification in meeting brochures, along with section sponsorship information, provides keys for registrants to ensure they get the most out of any event.

As indicated, the Value Ladder is a prototype. It is being used at these events as part of a series of "clinical trials." The MRSAT will be responding to feedback to improve the model. Also planned is the development of more specific models to correspond to a wider range of actuarial careers audiences.

Organizational Contributions	Industry-Wide Contributions		
Market	Industry	National	Global
Creating and managing organizational direction — by identifying best products and practices based on internal competencies and external market needs	industry industry rules and influ direction by at national level industry	Determining and influencing industry rules at international	
Employer/Client			level
Selecting and/or refining different products and processes to achieve stated business goals for employer and client	new products/ practices to maximize opportunities	make social policies	
Individual and Team Contributions			
Process	Actı	uarial	
Performing and/or overseeing established sequential technical processes within an entire product or line	Value		
Task/Technical	Ladder		
Performing specific tangible steps related to the technical work product	Lau		



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Highlights of the March, 2007 NAIC Life and Health Actuarial Task Force Meeting and Other NAIC Topics

By Ted Schlude, Jr.

Attended the NAIC Spring Meeting held March 9-12, 2007 in New York, N. Y., including meetings of the Life and Health Actuarial Task Force (LHATF) and selected meetings of the NAIC. Summarized below are the activities that took place at these meetings.

Life and Health Actuarial Task Force The LHATF met on Friday and Saturday (rather than Thursday and Friday) under the newly introduced, more concentrated NAIC meeting schedule format. Larry Bruning (Kansas) chaired the meeting because Mike Batte (Arizona) was unable to attend.

The following Principles-Based projects and related matters were discussed.

- 1. Overview from Academy PBR Steering Committee: Donna Claire, chair, Life Risk Management and Financial Soundness Committee of the Academy, gave a general presentation related to its oversight of various PBR projects and work groups. She reviewed a PBA Master Project Sheet which lays out the various project timelines and deliverables. Highlights are provided below.
 - <u>NAIC Life RBC Working Group:</u> While not meeting at this NAIC meeting, it was noted that the life product RBC proposal, C-3 Phase III, is nearing final stages in many respects.
 - <u>Reinsurance Work Group</u>: Sheldon Summers chairs this Academy group that is reviewing all PBA documents and proposals for reinsurance considerations.



- <u>Governance Work Group:</u> Helen Galt chairs this committee that is working on changes to corporate governance to accommodate PBR.
- <u>Accounting Practices Work Group:</u> William Hines chairs this group that is concentrating on Blanks changes required for PBR.
- <u>Economic Scenarios Work Group</u>: This project is nearing completion, which is expected by June, 2007. More detail is provided later in this report.
- <u>Consistency Work Group</u>: This work group released a new set of clarified principles designed to cover both reserve and capital considerations. It is also working on a glossary of terms and standardized reporting formats for assumptions.
- <u>Annuity Reserve Work Group</u>: This work group is identifying all annuity risks, focused on consistency between annuities and life, which risks should be considered in reserves and which are more appropriate for capital. It is in the process of comparing modeling results for five commonly used modeling systems marketed by vendors. The final work product will be a reserve proposal for fixed annuities.

In summary, the goal is to create a framework that provides for reasonable reserve and cap-

ital levels without stifling the life and annuity business.

2. Academy Life Reserve Work Group (LRWG): A presentation was provided by David Neve, co-chair on recent developments of LRWG and by Gary Falde, chair of the LRWG Asset Subgroup related to derivatives modeling.

David Neve indicated that the reserve model regulation and draft actuarial guidelines AG-PBRVAL and AG-DIS have been incorporated into a single document for the Valuation Manual. The new document will simply be called a life reserves Requirements document. Consistent formats will be used for all requirements sections of the Valuation Manual. The following items were highlighted.

- C-4 risks not specific to product are excluded.
- All risks must be considered and documentation is to be provided for why a risk was not considered.
- Principle 5 places emphasis on the aggregate margin even though there still will be a requirement for margins on each assumption, unless it can be demonstrated that there is a correlation between assumptions to justify an aggregate margin across more than one assumption.

- Scope Section was eliminated, as it will be addressed elsewhere in the Valuation Manual. This leaves open alternative approaches to PBA such as "PBA Lite" and phase-ins for certain products.
- Experience Reporting Section: was eliminated because it is included in the Valuation Law changes.
- Terminology was modified as follows to address liability concerns:
 - 1) from "Prudent Best Estimate" to "Prudent Estimate"
 - 2) from "Best Estimate" to "Anticipated Experience"
- Credibility Method: the reference to the Canadian methodology was dropped in favor of "X profitability of Y margin for error" where X and Y will be established by the NAIC.
- Provision for Model Understatement (PMU): This is a new concept intended to get at uncertainty related to complex models where modeling of derivatives is the emphasis. A practice note will develop concepts related to the modeling of sophisticated derivatives programs. This would be an add-on reserve after comparison of the deterministic reserve to the stochastic reserve.
- Derivatives Requirements: The requirements have changed significantly (streamlined).

A summary of outstanding technical issues was provided next. They include:

- Assumption Margins (aggregate or individual, what if experience is lacking, etc.)
- Risks that should be excluded from reserves (a new Academy document will soon be released).
- Reinsurance issues (non-proportional reinsurance/catastrophic coverages).
- Grading period for mortality credibility weighting.
- Margin ratio (Z factor): should it be retained or possibly be transferred to a practice note if it does not have any value to LHATF?

Provision for Model Understatement (PMU): This is a new concept intended to get at uncertainty related to complex models where modeling of derivatives is the emphasis.

The priority for LRWG moving forward into 2007 will include finalizing technical issues, developing recommendations on prescribed elements such as CTE level, interest rate and equity assumptions for the deterministic scenario and net spreads on reinvestments, perform additional product modeling and testing, consider items related to the ACLI/Treasury discussions, review exposure draft comments and consider simplified product approaches.

Finally, LHATF voted to expose the Life Requirements draft of the Valuation Manual for comment.

- 3. **Subgroup 4 Report:** Norm Hill provided the Subgroup 4 report, which is a subgroup of the Valuation Law and Manual Team that is addressing transitional issues and possible approaches to the small company issues raised in the context of PBR. Three possible approaches are being discussed.
 - (i) <u>Phase-In:</u> Phase in the LRWG requirements by product type. Would involve a deterministic reserve with a test to see if stochastic is required.
 - (ii) <u>Simplification</u>: Add simplifying elements to the LRWG approach to address small company issues such as a Gross Premium Reserve with provision for risk added.
 - (iii) <u>PBA Lite</u>: Develop a "PBA Lite" approach outside of LRWG that meets PBA principles.
- 4. Economic Scenarios Work Group: Larry Gorski provided an update on the refinements made to the interest rate model generator. As a result of the re-parameterization project the long rate has been revised from 5.4 percent to 5.5 percent (it was 6.55 percent in old interest rate model generator). Now the group has been working on a formula to dynamically update the target long rate.

The interest rate generator would be used for C-3 Phase I, C-3 Phase II and the PBR/PBA model. There will no longer be a 50/12 scenario option under C-3 Phase I. As a result, the Annuity Reserve Working Group has been



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looking at ways to speed up the run time process under a more robust stochastic framework and may be developing a Practice Note along these lines.

- 5. Report of the SOA Project Oversight Group (POG) on the Preferred Mortality Project: Larry Gorski provided a brief update on the preferred mortality project of the SOA. There will be four to six nonsmoker tables and two to three smoker tables differentiated by sex. Tables will be prepared with and without margins and the LRWG will develop a proposal for how the tables will be chosen and used. It was noted that there is a limited amount of data with respect to the underwriting scoring system currently, but as more experience comes in, this mechanism will become more predictive. Finally, he shared some mortality statistics from the study categorized by underwriting score.
- 6. AG VACARVM: Tom Campbell, representing the Academy, provided a summary of proposed changes to the September 2006 exposure of AG VACARVM. Because LHATF is in the process of surveying companies related to AG VACARVM reserve results, they decided not to expose this new draft document because the changes may create questions with respect to some of the responses. Rather, LHATF will work on the new AG VACARVM draft during conference calls and then expose a new AG VACARVM document after the survey responses have been received.

The ACLI requested that AG VACARVM be written to keep reserves and RBC as consistent as possible. They also indicated that describing the reserve as a deterministic standard scenario reserve plus an add-on equal to any excess of the stochastic result over the standard scenario is helpful for tax reserve purposes. They also indicated that they view the actuarial certification as comprehensive enough and that a separate management certification does not appear to be necessary.

New York expressed concerns over recent conclusions of the C-3 Phase II Results Subgroup regarding the variance in assumptions by company and lack of complete documentation. They indicated that C-3 Phase II capital levels may be low due to the reserves that have accumulated under AG 39 and are not convinced that dynamic hedging will work when it is needed the most, preferring hedges up front using long dated options.

7. Update on SVL II and Valuation Manual: Dave Neve provided a report for Mike Boerner (Texas) who was not in attendance, summarizing recent developments. Four subgroups are working on the Valuation Law and Manual. A description follows.

Subgroup 1.	PBA review requirements for manual. Thus far an introduction and princi- ples-based preamble have been written.
Subgroup 2.	Working on reserve requirements, AP&P Manual coordination, etc.
Subgroup 3.	Working on requirements for submit- ting experience data.
Subgroup 4.	Working on transitional and alterna- tive approaches with a focus on small company issues (report provided previously).

Regulators had a discussion related to the selection of the PBA reviewer and their responsibilities. The Academy recommended that the company choose an independent PBA reviewer. Some states believe that the state must select the reviewer to maintain balance and meet its responsibilities related to statutory valuation. Some regulators were also uncomfortable that the PBA reviewer was only opining on the judgment used by the valuation actuary related to PBR and not reviewing basic model validations. The Academy responded that it was their view that model accuracy should be part of the examination done by the auditors and state examiners, not the PBA reviewer.

One other issue came up related to the cash value floor requirement and whether or not it should be written directly into the Valuation Law rather than in the Valuation Manual. Several states appear to prefer an explicit CSV floor in the Valuation Law itself.

The ACLI asked that regulators hold a separate general meeting to discuss the conceptual framework and decide upon the general purpose of reserves and capital and will also bring this up at the Executive Committee's PBR Working Group meeting.

- 8. Non-forfeiture Law Improvement Project: John MacBain, chair, provided the Academy report that included a review of the report provided in December, 2006 related to a set of principles for non-forfeiture that include:
 - Based on pre-funding of benefits.
 - Specify a broad methodology not amounts.
 - No recognition of subsequent changes in insurability status should be reflected in non-forfeiture.
 - Cash does not need to be paid.
 - Same method for life and annuities.
 - Non-guaranteed elements would not be regulated until credited or charged.

He then asked LHATF to review and answer a set of questions that were distributed at the meeting related to their views on certain key issues.

- SOA Experience Study Reports: The SOA gave presentations on several projects discussed below.
 - Pre-need Mortality Study: LHATF heard a report from Professor Jay Vadiveloo, related to the results of the pre-need research and experience studies. The study included consideration of five-, 10- and 15-year select periods, single versus five pay, males versus females at various pivotal ages. Their recommendation is as follows:
 - Split table into Male versus Female.
 - Five-year select period is appropriate for pre-need.
 - Extended table to issue age 99, attained age 104.
 - Below age 50, there is little data so smoothing and trending methods were used.
 - Reverse select and ultimate period has much higher mortality than 80 CSO. Ultimate is surprisingly close to 80 CSO (females crossover, male rates stay above 80 CSO).
 - No margins have been developed yet.

An Appendix to the presentation provides the five-year select and ultimate qx's. Next steps include: 1) margins to be added by the June 2007 NAIC meeting, 2) the Academy signoff review, and 3) adoption of the table by the states. Targeted implementation is 1/1/2008 when the 2001 CSO Table will be mandatory for tax reserves and is viewed as an inadequate table for pre-need business.

- SOA Pandemic Study: Larry Gorski indicated that the SOA plans to have a Life Pandemic Study completed by June 2007 and work will begin on a Health Pandemic Study.
- Cancer Table Update: There has been a standing request from LHATF to update

The Issues Subgroup is considering how to define risk margins, studying statistical distributions of claims, monitoring life developments and international developments and considering the ability to develop a morbidity table for use in PBR.

the 1985 Cancer Table, but to date only five companies have agreed to participate. Regulators will contact cancer companies in their state to try to encourage them to participate in this table update.

At its second meeting, LHATF discussed the following topics.

- 1. A&H Working Group: The A&H Working Group received a presentation from the Academy's State Long-Term Care Principles-Based Work Group related to PBR for Long-Term Care products. It was noted that mortality, morbidity, lapses and investment returns make PBR for LTC more complicated than for life and annuities. Key concerns to be addressed include:
 - Lack of systems for PBR on LTC products.
 - Reflection of the potential for future rate increases in PBR.
 - LTC product and marketplace changes.
 - Probability distributions for morbidity and persistency assumptions.
 - Use of company and industry experience.
 - Anticipated limits on interest rates.

A Technical Subgroup is in the process of developing a model to test different approaches and analyze results. The Issues Subgroup is considering how to define risk margins, studying statistical distributions of claims, monitoring life developments and international developments and considering the ability to develop a morbidity table for use in PBR. Bill Carmello (New York) indicated that margins should be on individual assumptions unless it can be demonstrated that assumptions are correlated, similar to the direction of the LRWG.

Other items discussed include work on new guidance with respect to the actuarial opin-

ion for the Health Blank where currently the only guidance is in the instructions to the Health Blank, but there are no model laws or regulations defining qualified actuary, appointed actuary, actuarial report, etc.

Also in June, 2007, a small workgroup will present a report to A&HWG on its conclusions related to the individual medical market and possible methods to analyze renewal rates by health insurers.

- 2. Group Term Life Waiver Table: The proposed group term waiver basic table and valuation table with margins is in the process of being reviewed by the Academy from a reserve margin and policy issues standpoint.
- 3. Referral From Risk Assessment Working Group (RAWG): LHATF is beginning to consider the role of the actuary in a Risk Focused Examination Framework at the request of the RAWG. The result is that examination focus will likely extend into areas other than valuation, such as pricing. A similar request has been made of the Casualty Actuarial Task Force.
- 4. Actuarial Guideline TAB: Discussion continues on AG TAB which would provide guidance with respect to the use of the 2001 CSO Preferred Mortality Tables. The ACLI is continuing to address concerns on the part of regulators as to how a company goes about justifying the use of a preferred table for reserve valuation purposes.
- 5. Reinsurance Reserve Credit Proposal: LHATF, in conference call prior to this meeting, sent a letter to the Statutory Accounting Principles Working Group (SAPWG) that states that they could not reach a consensus on the reserve credit issue raised by California and New York. At its meeting on

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March 10, 2007, the SAPWG rejected the California proposal. This issue may be brought back to the Emerging Accounting Issues Working Group for further consideration.

- 6. Other Matters: LHATF discussed the following items.
 - NAIC Statistical Agent for PBR: LHATF is considering what an appropriate NAIC statistical agent would be.
 - Patents on Life and Annuity Products: An NAIC staff member noted a National Underwriter Article on patents that are being obtained on life and annuity products. The question is whether or not patented processes should be regulated because they might result in non-competition.
 - IAA Risk Margin Paper: It was noted that Kris DeFrain of the NAIC has written a fourpage summary of the IAA risk margin paper.

Principles-Based Reserving (Ex) Working Group (PBRWG)

Topics discussed by the PBRWG included its rules of operation, Academy presentations, an ACLI comment letter, and the PBA Master Project Sheet.

The working group adopted its draft rules of operation then discussed various Academy PBR projects and interactions between the PBRWG and the AAA. The Academy's key 2007 deliverables include the Valuation Manual, SVL, integration of PBA into the examination structure, corporate governance, life reserve requirements, timeline and requirements for RBC and development of a timeline for annuity reserves.

Policy issues for PBRWG to consider include the possible use of prototyping (bringing in PBR on a product level basis), determining the purpose of reserves in PBR, considering statistical agents and data collection issues, and to develop a feedback loop for companies, reviewers and examiners. PBRWG also discussed the Academy Master Project Sheet and where regulatory input will be needed. One regulator indicated that C-3 Phase I and II feedback needs to be incorporated, others said that the SAPWG needs to be in the flow. The NAIC will map out its committee responsibilities and provided feedback to the Academy.

Next, the working group discussed an ACLI letter that requests the PBRWG to develop some overarching principles and develop a project plan and timeline so the industry can begin to prepare for PBR. Other questions posed included consistency with international standards and the concept of an acceptable peer reviewer from the state's standpoint. Regulators indicated that the international convergence issue is bigger than a PBRWG responsibility and other groups in the NAIC will be working on and monitoring convergence.

Finally, the standardized forms for reporting assumptions, experience and statistical agents were discussed. It was noted that 15 states are in the process of adopting the 2001 CSO Preferred Tables that calls for a statistical agent to compile company submitted experience. The PBRWG will have LHATF develop a definition of statistical agent and recommend forms for the data collection. Requirements for a statistical agent will include maintaining confidentiality, significant IT infrastructure, ability to perform experience studies, etc.

Capital Adequacy Task Force (CADTF)

I attended two meetings related to the Capital Adequacy Task Force.

- 1. CADTF Meeting: The following projects were discussed.
 - Life RBC WG: This working group did not meet at the Spring NAIC meeting, but has scheduled three calls in March/April to discuss C-3 Phase III (3/30), C-3 Phase II (4/13) and C-3 Phase I (4/20). Face-toface meetings will be scheduled for June and December, 2007 at the regular NAIC meetings.
 - P&C RBC WG: One item of note relates to the RBC charge for state deposit funds. There is a 1 percent C-1 charge in addition to the normal C-1 charge for non-controlled assets in the P&C blank. The blanks had recently been changed to isolate state deposit funds because they tend to be very illiquid and are not available to a regulator to pay claims generally, because each state refuses to relinquish its deposit funds in a rehabilitation or liquidation. The industry argued that the 1 percent risk charge was inappropriate because there was little default risk related to these deposits. One regulator said that based on his experience; there should be even a higher charge to reflect the illiquidity of these assets. Other regulators felt that a liquidation charge does not belong in C-1 and that more thought needs to be given to this matter.
 - <u>Securities Lending Programs:</u> CADTF next heard a presentation from Prudential related to the C-1 charge of 1.3 percent Life (1 percent P&C) for securities lending programs and the fact that such a charge does not reflect the low risk of such pro-

grams. Prudential indicated that it has not had losses since it got into the securities lending business in the 1980s and it is viewed today as essentially a risk-free transaction. A regulatory study group was formed (Calif., N.Y., Conn., Neb.) to discuss the questions and issues. MET, Prudential and Genworth were identified as the major companies involved in securities lending. Wisconsin asked whether or not there is some operational risk charge that should be reflected related to monitoring that the appropriate level of collateral is being maintained by the borrower (collateral requirements are 102 percent of market value). The industry interested parties will present a proposal to replace the off-balance sheet charge for securities lending with a reinvestment risk charge associated with the restricted capital by May, 2007 for CADTF to consider.

Mortgage Experience Adjustment Factor (MEAF): Next, CADTF heard a presentation from TIAA-CREF related to the MEAF. Due to a single foreclosure, TIAA had a significant increase in RBC and was looking to CADTF to consider some of the newer software models available in the industry today that measure mortgage portfolio risk.

They argued that the NAIC approach was developed prior to these better software risk measurement tools and only reflects the company's aggregate experience compared to industry-wide experience but does not capture the risk inherent in the company's in-force mortgage portfolio.

Because this is mainly a life company issue, the Life RBC Working Group will decide whether to consider this issue. One regulator again commented that items like the MEAF or securities lending program always seem to reduce base level RBC and perhaps consideration should be given to increasing the NAIC Company Action Level given that most changes to the formula have resulted in lower capital requirements.

The Academy is working with interested parties to better classify the risks and structures of hybrids.

- Agenda for 2007: CADTF reviewed its agenda for 2007 and noted that the C-3 Phase II subgroup will be recommending changes to C-3 Phase II mainly in the area of the documentation requirements generally, which they felt was somewhat lacking based on the 2005 year-end review that was performed. They will also be looking at sensitivity results to review the effectiveness and value of the Standard Scenario. In the second quarter 2007, the subgroup will review the 2006 year-end C-3 Phase II results. The MEAF and securities lending issues will be added to the agenda and priorities for these items will be set. CADTF will also keep track of the REO Proposal in light of the unauthorized reinsurer topic on its agenda (that addresses whether or not RBC credit for unauthorized reinsurance should be collateralized similar to reinsurance reserve credits).
- 2. Hybrid RBC Working Group: This working group heard a report from Nancy Bennett representing the Academy related to progress on the long-term solution to hybrid security RBC. The Academy is working with interested parties to better classify the risks and structures of hybrids. They have received a presentation from Merrill Lynch on traditional hybrids and have heard a presentation from the SVO on its view. However, experience data is lacking and some newer classes of hybrids are emerging as well. Preliminary thoughts of the Academy include:
 - Hybrids should be viewed as debt instruments.
 - NRSRO ratings do not capture all risk, but extension risk is captured somewhat in C-3 Phase I and in the charge for callable securities in the C-3 interest rate risk framework.
 - More understanding of the new hybrid market is needed.

Extension risk: needs to be studied because there are other securities such as collateralized debt and mortgage obligations and other investments with extension risk that is not currently being captured in RBC. RBC is a relatively blunt instrument and does not address all types of security structures so the request with respect to hybrids is somewhat inconsistent with the way these other securities are handled.

NAIC General Session / Executive (EX) Plenary / Life (A) Committee Meetings

At the general meeting session, Eric Dinello, superintendent of New York who was recently appointed by Elliott Spitzer, highlighted key issues that the New York department would be addressing:

- 1. <u>Regulation:</u> will be more robust in the future. Principles-based regulation and reserving will require it.
- 2. <u>Contract certainty:</u> He observed that issues related to contract certainty that arose as a result of 9/11 will be addressed, noting that the issue of contract coverage has been solved in London already.
- 3. Transparency in the brokerage community
- 4. Collateralization in U.S. reinsurance
- 5. Suitability
- 6. <u>TRIA</u>
- 7. Licensing: best practices
- 8. Medical malpractice: is broken in New York.
- Worker's compensation: a change in New York law is resulting in improved benefits and lower cost.

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- 10. <u>Universal health care:</u> It has happened in Massachusetts, California and Vermont and will happen in New York.
- 11. <u>49/1 Project:</u> New York wants to work to become an accredited state by the NAIC. Currently, it is the only state that is not accredited because of its deviations from NAIC model laws and regulations, even though it is viewed as a strong state from a regulatory perspective.

The Executive/Plenary Committee received various reports, some of which are highlighted below.

- Life and Annuity (A) Committee report: Jim Poolman recommended that EX/Plenary send the Viatical Settlements Model Revisions back to the Life (A) Committee for some changes related to a conflict between the model revisions and the National Bank Act and G-L-B with respect to assignments of insurance policies as collateral for loans by banks and savings and loan institutions. It is anticipated that a revised model will be available for EX/Plenary to adopt in June 2007. Various commissioners voiced a desire to adopt the Viatical Model revisions as soon as possible to stop perceived STOLI abuses.
- 2. Financial Condition (E) Committee: It was noted that the Financial Condition (E) Committee in December 2006 adopted the SVO report on transparency as well as the AAA work plan on hybrid security RBC and gave the Reinsurance Task Force two new charges related to the Reinsurance Evaluation Office (REO) proposal.
- 3. Special EX Committee project update: Several projects were discussed.
 - <u>Military sales:</u> A Model Regulation draft was issued February 2. A second draft will be released in the next couple of weeks with adoption anticipated in June 2007. A report will be given to Congress on March 29th and there is a meeting scheduled with the Department of Defense regarding progress made by the NAIC in this area.
 - <u>Broker activities:</u> Work continues with respect to certain practical hurdles in getting companies and agents to agree to disclosure of commissions.
 - <u>Government Affairs task force:</u> This task force was renamed the Government Relations Leadership Council (GRLC) and will be made up of senior NAIC officers and zone leaders to consider key issues.

- <u>Principles-Based Reserving (EX) task force:</u> It was noted that this group will become more active in 2007 as discussed previously in this report.

The Life Insurance and Annuity (A) Committee met and discussed the following topics.

- 1. **Consumer Buyer's Guides charge:** The buyer's guides for annuities and life insurance will be revised in conjunction with the respective disclosure model regulation revisions. The viatical settlements brochures will be reviewed as well.
- 2. Foreign travel exclusions: A contentious discussion related to the revisions to the Unfair Trade Practices Act and foreign travel exclusion took place. The concept is that past or future lawful travel not be used arbitrarily as an underwriting factor without support by actuarial risk analysis. In an amendment proposed by Alabama, an underwriting practice filing requirement for foreign travel was eliminated from the revisions at the objection of Florida one of the main sponsors. The document will be discussed further at the next meeting.
- 3. Viatical settlements model: It was noted that the model revisions (to address Stranger Owned or Initiated Life Insurance) will come back to the Life (A) Committee for a quick revision related to G-L-B and then go back to EX/Plenary in June 2007 for adoption.

Accounting Practices and Procedures Task Force and Related Meetings

I attended several other meetings related to certain accounting issues described below.

 Emerging Accounting Issues Working Group (EAIWG) and Statutory Accounting Principles Working Group (SAPWG): SAPWG heard a report from Larry Bruning of LHATF related to Principles-Based Reserves. Currently, a capital structure is in place for variable annuity GMDB/VAGLB risk. Reserving for VAs is close. Proposals for life reserves and capital are close to being finished as well. The A&H Working Group heard a report on LTC PBR and there is an Annuity Reserve Work Group working on reserves for fixed annuity products.

Key issues will include:

 Phasing-in requirements for different product types will be a long range goal for a principles-based methodology to work for all business.

- Who hires the reviewing actuary? (company or state)
- Delegation of state authority to a centralized Valuation Manual (are states willing to give up power?)
- Corporate governance issues

Future updates on PBR for SAPWG will be provided as necessary.

Secondly, the SAPWG rejected a proposal to consider the reinsurance credit issue on policies where reinsurance premiums are paid annually but the underlying policy mode is more frequent than annual. This creates a perception by certain states that reserve credit is overstated by the ceding company in such an instance due mainly to the net valuation premium exceeding the gross premium. It appears that this issue may be brought back to the Emerging Accounting Issues Working Group to consider these issues further.

2. Financial Regulation Standards and Accreditation Committee: This committee adopted updates to the Blanks instructions, RBC instructions, SVO Purposes and Procedures Manual and the Accounting Practices and Procedures Manual. It exposed for 30 days changes to the Financial Condition Examiners Handbook related to the risk-focused examination review team guidelines and the Model Audit Rule Revisions for best practices with respect to auditor independence, internal controls and corporate governance. The timeframe for the Model Audit Rule Revisions was accelerated from a 1/1/2011 normal effective date to 1/1/2010 because of the importance of these revisions that incorporate certain aspects of SOX, deemed appropriate for insurers, into the NAIC Model Audit Rule.

Valuation of Securities Task Force

Under other matters, the VOS Task Force heard objections from various industry groups related to an SVO research report on the hybrid security market that the industry characterized as misleading. The SVO report focused on the impact of SVO actions related to its classification of hybrid securities. Turmoil in the marketplace was created on March 15 when the SVO classified a

The goal of most of these initiatives is mutual recognition within the EU and promoting new risk management techniques that will lead to market consistent valuations without hidden margins in reserves.

hybrid security as equity. This caused a significant decrease in the value of hybrids generally (estimated at about \$1 billion), as well as a decrease in the ability to liquidate the securities for a temporary period until the NAIC implemented its one notch down preferred stock classification, short-term solution for financial reporting and capital requirements. The SVO report focused on two points in time March 1 and Oct. 1 in reaching its conclusions related to market impact, ignoring what happened on March 15. The industry re-emphasized the importance of transparency with respect to the SVO rating process.

Other Matters

I attended several other meetings that may be of interest.

1. Reinsurance Task Force: The Reinsurance Task Force received presentations from the IAIS and the FFSA (European Industry Update-France) on developments with respect to mutual recognition, reinsurance directives, solvency II framework and IFRS II accounting developments. The goal of most of these initiatives is mutual recognition within the EU and promoting new risk management techniques that will lead to market consistent valuations without hidden margins in reserves. Prudence would be reflected in capital margins.

Next, they discussed the Financial Condition (E) Committee charges related to the Reinsurance Evaluation Office (REO) proposal that calls for a more detailed proposal by the September 2007 NAIC meeting. Regulators plan to have a two-day Executive Session to begin drafting. The second charge from E Committee is to develop a longer range framework for the regulation of reinsurance. 2. Risk Assessment Working Group: It was noted that the 2007 Examiners Handbook has been released and it includes the risk focused examination guidance and contains a three year phase-in period. The RAWG is continuing to work on defining the actuary's role in a risk-focused examination, noting that for P&C examinations, focus historically was on loss reserves but it appears that this should be expanded to: 1) corporate governance issues related to the policy for setting loss reserves, and 2) providing for a review of pricing risk inherent in the premium rate setting process.

Work is underway to put the Financial Analysis Handbook in sync with the risk focused emphasis now reflected in the Examiner's Handbook.

The RAWG also discussed the implementation process that includes a formal process for maintaining the Examiners Handbook (maintenance agenda process) as well as the training sessions that are ongoing related to risk-focused examinations.

3. Casualty Actuarial Task Force: Two summaries related to international accounting activities were mentioned: 1) a paper by Kris DeFrain of the NAIC summarizing the IAA risk margins paper, and 2) a paper by Alan Seeley of New Mexico that is a summary of the UK General Insurance Research Organization (GIRO) Risk Margin Working Party Report.

The next NAIC meeting will be held in San Francisco in June, 2007. ●



- Actual mean reserves compared to 80 CSO are highest in duration 1 and generally decrease by duration and go below 80 CSO reserves.
- For issue age 75, A/E mean reserves start to increase after duration 6 but stay below 100 percent throughout.
- The first year A/E decreases as the issue age increases.
- Pre-need mortality above is without margin. Reserves using loaded mortality would be higher than shown.

In Table 2 on page 11, we can see another feature of the data, the level of the ultimate mortality relative to the 1980 CSO mortality. Note that the two sets of mortality rates are fairly close below attained age 70, but then the pre-need mortality is lower than the 1980 CSO mortality rates at the higher attained ages.

Note that both the level and the slope of a mortality table affect reserve calculations. With a five-year select period for both male and female mortality rates, combined with the lower level of ultimate mortality than the 1980 CSO table, the pre-need male and female basic tables are flatter than the corresponding 1980 CSO male and female tables. Of course, the pre-need mortality table is unloaded; it is a basic table, not a valuation mortality table. At the time of this writing, the POG is beginning work on adding margins to the basic table and will be collaborating with the American Academy of Actuaries in finalizing the valuation table.

Keeping in mind the fact that the pre-need basic mortality tables are unloaded, look at Table 3 above which illustrates several sample reserve calculations for single-pay policies. The Reserve Ratio on the vertical axis is the ratio of the reserves calculated using the pre-need mortality table to the corresponding reserves calculated using 1980 CSO mortality. The typical pattern is a U-shape that begins above 100 percent and then decreases for several durations before starting to rise again.

Remember that all the above comparisons are to reserves based on the 1980 CSO table, not to the 2001 CSO table. The 2001 CSO table is currently required for use for tax reserves beginning in 2008 and for statutory reserves beginning in 2009. The POG expects to make a recommendation to LHATF either before or at the June NAIC meetings. Once this valuation mortality proposal has been approved, it will be important to seek state adoption of the new pre-need valuation mortality table as quickly as possible.

What's New In Research?

By Ronora Stryker

esides developing webcasts and seminars, the Product Development Section also sponsors a great deal of research to meet member needs for information, tools and insights to help them in their daily practice. One such project underway examines the possible impact of the change in premium after the end of the level premium period for individual term insurance products on mortality and lapse experience. A company survey of the top term insurance writers was recently conducted and the results are currently being analyzed by a Milliman research team led by Jeff Dukes and Kathy Dziedzic. Findings will be made available in a report to be posted on the SOA's Web site by mid 2007.

"Stochastic Pricing For Embedded Options in Life and Annuity Products" is another project initiated by the section and is currently in the beginning stages. A formal Request For Proposals has been issued to find a qualified researcher to examine the nature of stochastic analysis for embedded options, develop a stochastic pricing methodology that can be utilized by insurers, illustrate the application of the method and identify implementation considerations. More information about the project is available at: http://www.soa.org/research/other-researchprojects/proposal-requests/research-request-forproposal-stochastic-pricing-for-embeddedoptions-in-life-insurance-and-annuityproducts.aspx

A recently completed section project that is receiving much attention and was featured in the National Underwriter is the "Substandard Annuities Report." In this paper, the LIMRA International and Ernst & Young authors de-



scribe the substandard annuity products currently available in the marketplace, discuss the market opportunity for these products and the associated risk management issues of offering these products. To view more on this subject, visit: *http://www.soa.org/research/life/researchsubstandard-annuities-report.aspx.*

When you have finished reading about substandard annuities, peruse the report on nontraditional guarantee products which contains the findings of a survey of company practices that summarize the various individual life and annuity product guarantee features found in the marketplace, their associated risks, the methodologies used to analyze, quantify, and manage these risks and their impact on policyholder behavior. This is also available on the SOA Web site at: http://www.soa.org/research/life/researchnon-traditional-guarantees-on-life-and-annuityproducts.aspx. If you would like more information about any of these projects or are interested in getting involved in section-sponsored research or have an idea for a research project that would benefit Product Development Section members, please contact Ronora Stryker, SOA research actuary, at *researchprojects@soa.org.*

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