small talk

Newsletter of the Smaller Insurance Company Section

ISSUE 11 MAY 1998

From the Editor

by James R. Thompson

This issue of *small talk* tries to accomplish two main objectives: to discuss the peculiar problems of smaller companies in modeling CMOs and to present our usual legislative update. The pace of regulation has been increasing. The NAIC is providing us with many issues to cover. It is sometimes difficult to know where to begin.

One of the most significant developments is in the area of proposed guideline *XXX*. This NAIC-adopted model regulation deals with the reserving of term insurance and UL with certain guarantees. It is supposed to provide more theoretically correct reserves than the current standard valuation law with the unitary approach, because it considers the relation between the gross premiums and mortality by segments. The result, however, is to increase reserves significantly, especially for policies with longer guarantees and in the more select premium classes.

States that have passed *XXX* have generally done so with the provision that it will take effect only if states representing 51% of the population also pass it. Many states have not passed it

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Codification Coming Your Way

by R. Thomas Herget

Statutory accounting for life, health, and P&C companies has always relied on prescribed and permitted practices. These practices were promulgated by each of the 50 states. There was enough diversity in these practices that by the late 1980s, the accounting community (particularly the audit firms) no longer felt comfortable issuing opinions based on statutory accounting. The concern was that there was no single set of practices that companies adhered to.

"The codification documents can all be found on the NAIC's web site, naic.org."

The NAIC responded to this by forming a committee of regulators to prescribe specific procedures and methods for compiling statutory financial statements. It was also its charge to define principles underlying statutory accounting.

For actuaries, it is certainly time to start paying attention to this regulation. It was approved at the NAIC's spring meeting in Salt Lake City in March 1998.

The codification documents can all be found on the NAIC's web site, naic.org. There is a preamble that attempts to identify the fundamental principles for statutory accounting. The preamble is followed by 90 Statements of Statutory Accounting Principles (SSAPs), which spell out the rules for codified statutory accounting.

My personal opinion is that one might find the preamble weak in establishing the fundamentals for financial reporting. Also, its stated objectives are not always supported (and sometimes contradicted) by the subsequent reserve requirements.

Some of the concepts in the preamble are that "SAP is conservative … but not unreasonably conservative." "Statutory accounting should be reasonably conservative over the span of economic cycles." "Valuation procedures should … prevent sharp fluctuations in surplus." "The income statement …

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or are ignoring it. Although New York has had it (NY Regulation 147) for several years, most companies are accustomed to marketing with a non-New York strategy. Recently Wisconsin passed it with the effective date 1/1/99. Regulators are still pushing it.

At the March NAIC meeting, there was a significant development. After presentations by the industry opposing the current form, the regulators asked the industry to come back with a counterproposal to the current *XXX*. On April 2, industry representatives gathered near Chicago in a open meeting (even tuning in various regulators on a speaker phone). I was present. I watched in amazement as actuaries representing various companies, large and small, mutual and stock, both players in this market and those who have not, consultants who work with smaller companies and the American Council of Life Insurance and the National Alliance of Life Companies (working with generally smaller companies), brainstormed to see if they could agree on an alternative.

A verbal consensus was obtained. It will be written out in detail and presented at an ACLI meeting May 12. The NALC should also have been apprised of it. It may then go on to the June NAIC meeting. This reminded me of the Missouri Compromise from before the American Civil War. It is neither a unitary approach, which can result in zero terminal reserves for some long-level term insurance with a tail of YRT, nor is it like the current *XXX*, which will result in significant terminal and deficiency reserves for policies with level premium and guarantees over five years.

As I write this editorial, there is nothing in writing, but I understand the general principles. One deals with the terminal reserves, which are humped for a level-premium term insurance product with no YRT tail. The mortality table need not be the one in the current *XXX*. It will represent more recent (and hence lower) mortality and should have a longer select period than 15 years. There should be provision for the more select classes. The net effect will be lower terminal reserves.

One principle is that different contract designs should not produce different terminal reserves. Thus, if one has a 20-year level term with a 20-year guarantee, the same with a five-year guarantee, a 20-year reentry term with a YRT tail with a 20-year guarantee, and one with a five-year guarantee, the terminal reserve should be the same. It will be based on the current-level premium. No advantage will be gained by having or not having a YRT tail.

"This reminded me of the Missouri Compromise from before the American Civil War. It is neither a unitary approach ... nor is it like the current XXX ..."

The deficiency reserve is different. Those of us in pricing know that the deficiency reserve is often large or at least very significant. It is viewed as unnecessary because we know from profit studies that such a high reserve is unnecessary.

The mortality for the deficiency reserve will be much lower than that for the terminal reserve. There was discussion on the use of a valuation actuary approach. This might mean that the level of deficiency reserve might be determined by a gross premium valuation (GPV) or cash-flow testing (CFT). There might be some minimum mortality table, however. One concern I have is that the strict valuation actuary approach will mean that larger companies with more credible experience will have some advantage. Perhaps some minimum or default mortality would provide a level playing field. For further comments on this, see the article by Jim Van Elsen on page 21.

Another issue is codification. See the article by Tom Herget on page 1 on the results of the March NAIC meeting. Also note the comments by Commissioner D'Annunzio of Michigan (page 3). This is a reprint of a letter written to the *National Underwriter* prior to the March meeting. Note the comments from the NALC newsletter.

Another issue is the Unified Valuation Law (UVS). This is the revision to

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James R. Thompson, Newsletter Editor
Central Actuarial Associates
P.O. Box 1361
Crystal Lake, Il 60039–1361
Phone: 815–459–2083, Fax: 815–459–2092
e-mail: 73231.134@compuserve.com

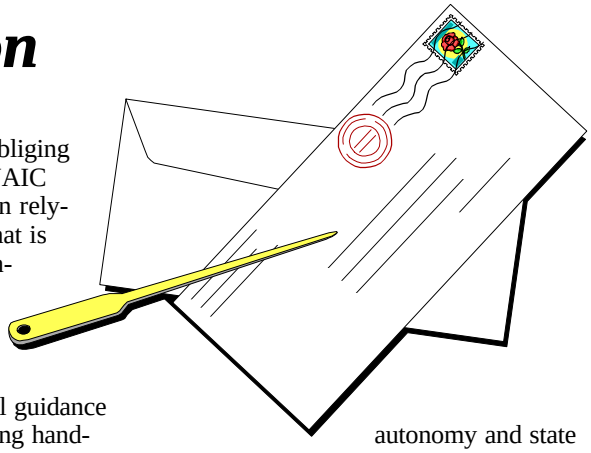
A Commissioner on Codification

Editor's Note: *The following originally appeared in a Letter to the Editor in the January 12, 1998 issue of the* National Underwriter *and is reprinted here with permission.*

TO THE EDITOR:

I have read several *National Underwriter* articles written from different perspectives regarding the National Association of Insurance Commissioners' project to codify statutory accounting (codification). What seems to be missing from that mix is any recognition that the core of the codification project is an important update of the accounting practices and procedures handbook that guides examiners and auditors nationwide. The current NAIC handbook is not controversial; in fact, it provides a baseline and coordination between the states for the very backbone of insurance regulation—monitoring the financial solvency of insurance companies. Several peripheral issues currently threaten this necessary update, not the least of which is the balance between coordinating regulation across state lines and states' rights to regulate independently. Codification gets my vote as soon as we set aside these peripheral issues and get down to the invaluable core.

No commissioner has ever told me that an acceptable result of codification would include a reduction of the authority and autonomy state regulators are given by their legislators. Yet, and seemingly by accident, the current codification work product does just that by eliminating prescribed and permitted practices from the current statutory accounting hierarchy and by penalizing commissioners for permitting practices consistent with the authority delegated to them by their legislatures. By requiring adverse audit opinions for companies that follow state permitted practices, the NAIC would be obliging those companies to follow the NAIC codification standards rather than relying on their state regulators. That is a vast departure from today's environment under which legislatures and regulators regularly determine the proper local accounting treatment and the NAIC provides technical guidance and support through its accounting handbook.



The EX(4) committee attempts to address part of this unintended consequence by adopting language allowing state to "opt out" of the investment benchmark disclosure piece. But that required individual state action to avoid the results of NAIC policy making—a significant change from our traditional system of creating models for each state to adopt or ignore. Moreover, it is unclear whether any state choosing to opt out would continue to enjoy NAIC support for the maintenance and upkeep of the current accounting practices and procedures manual. Finally, if state accreditation depends upon audits performed under these new standards, the entire codification would be delayed by the accreditation process, or that process would have to be circumvented. I doubt any commissioner wants to try explaining the resulting loss of autonomy to a government or legislature.

The technicians and staff have tried in earnest to do solve these problems. In some cases the solutions failed to solve the political consequences of expanding the scope of NAIC technical guidance. This is not an unexpected outcome given that commissioners' staff, not the commissioners themselves, have participated in the details of this project thus far. It is now time for the commissioners to consider and resolve the issues that create the political consequences. Commissioner Musser recognized the importance of legislative autonomy and state regulators' authority and some of the impact of codification on those ideals. At her last meeting she wisely chose to refer the codification project for further refinement, and to provide the NAIC with an opportunity for further review by commissioners.

The NAIC is at another important crossroads in deciding the outcome of codification. The controversial, peripheral issues need to be debated by commissioners without regard to parochial industry needs, goals of the AICPA, or the sensibilities of the very talented technicians who have worked hard to produce the codification product. In light of goals, comments, and concerns expressed by the AICPA, NCOIL, and interested parties from industry, these matters need to be decided by the chief regulator in each state. I urge my fellow commissioners to review codification thoroughly, discuss it with their governors and legislatures, contact the affected parties, and provide immediate input to the special ad hoc task force on codification so we can move this project forward without compromising important updates to the NAIC accounting practices and procedures manual. If we need to adopt benchmarks or encourage accounting uniformity beyond what we have today, let's pursue those without compromising the autonomy preserved by our current model-based system.

D.A. D'Annunzio
Acting Commissioner of Insurance
Michigan Insurance Bureau
Lansing, Michigan

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the Standard Valuation Law. The Academy committee produced a report in December. I have been following this on behalf of *small talk*. To paraphrase the Executive Summary of this report, the concept is "…far-reaching; it abandons the current rigid approach and focuses on providing necessary financial information on a consistent basis to all interested parties." The UVS should address the needs of regulators and others within a single system. This report was assembled after investigations into the valuation procedures in a variety of other countries.

The framework mentions 11 points. Of particular note, the UVS shall "support financial analysis at points in time and over time," "be built upon best estimate assumptions with explicit determinable margins," shall "address overall solvency, not just contract reserves," shall enable a comparison between assumptions and emerging experience, "balance practicality, cost and resource effectiveness," "be consistent for all companies and among regulatory jurisdictions," and "utilize actuarial judgment in preference to prescribed methods and assumptions." Members were asked to propose a new valuation law. One of our Section members, Norman Hill, has done so in his article on page 16.

Another issue is demutualization. We have two articles on this, one by Thomas Tierney on the New York situation and another by Chris DesRochers on the general issue. There are various other articles, including discussion of the smaller company exemptions for cash-flow testing, relations between federal and state authority, and banks in insurance.

Finally there are several on investments. We are trying to examine the problem of modeling CMOs. These have become increasingly popular. Modeling them is difficult. In the past, several service bureaus have done the modeling for life companies. Recent improvements in cash-flow testing software used by many companies have enabled larger companies with trained staffs to take this function in-house. The service bureaus have raised their prices so that it is not economical for a smaller company to use their services.

What options are available to the smaller company, which may not even have an investment department and which may use consultants for buying assets and performing the cash-flow testing? Several articles explore approaches to this. Note one by Dale Hall, another by Jay Glacy, and a related article on duration by the staff of CMS, a service bureau which has done work for clients in the past. Although it still does, their software is now making its way to brokerage houses. Thus smaller companies should be able to get this as a client service.

Finally, if you are coming to the Spring Meeting in Maui, I will be moderating a panel on having a positive influence on legislative and regulatory developments. There is much going on, and we all need to follow events and also learn how to influence them.

James R. Thompson, FSA, is a consultant with Central Actuarial Associates in Crystal Lake, Illinois and Editor of small talk.

Small Talk from the High Chair

by John E. Wade

The Smaller Insurance Company Section is particularly interested in helping the actuaries of smaller companies deal with the increasingly complex requirements of both standards of practice and regulatory requirements, as well as providing a forum for discussion of topics unique to smaller companies.

In the future, we would expect to continue to (1) provide a newsletter to report on various items of interest to the Section and (2) conduct sessions at both the Spring and Annual SOA Meetings on topics of particular interest to small companies. We would also like to participate in the Valuation Actuary Symposium where appropriate. And last, we would expect to continue our participation in the finance and investment management practice area and the life insurance practice area.

In addition to these continuing functions, we hope in the future that the Section Council will develop an issues survey that will help us to better profile our constituency and identify the issues that are important to them. Some of the obvious issues facing the smaller companies are compliance with market conduct practices and asset-adequacy requirements and dealing with issues of merger and acquisition, critical mass, and costs of technological competence.

We are getting ready to elect three more members for three-year terms. We would like interested parties to submit a letter of interest and biographical information to Lois Chinnock at the SOA by May 14. We can then prepare a slate of candidates for election.

John E. Wade, FSA, is Executive Vice President and CFO at American Memorial Life Insurance Company in Rapid City, South Dakota and Chairperson of the Smaller Insurance Company Section Council.

Codification Coming Your Way
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should not be diminished in importance …" "Liabilities require recognition as incurred." "Revenue should be recognized only as the earnings process of the underlying underwriting or investment business is completed."

For reserves, no new methodologies are articulated. The called-for reserve methodologies are identical to today's statutory reserve regulations. If these methods are applied, the reader might conclude that some aspects of the preamble are breached.

For example, annuity CARVM reserves are often worst-case and would thus not be "reasonably" conservative. Skyrocketing deficiency reserves caused by small-premium differentials could not be called "reasonably" conservative. The addition of profitable new business nevertheless can cause severe first-year losses, which would cause a "sharp fluctuation of surplus."

Thus, I maintain that the preamble, especially when coupled with its prescribed regulations, is insufficient to describe the fundamentals underlying an accounting basis. The actuary needs to look then at the Statements of Statutory Accounting Principles. Several of these SSAPs specifically address reserves.

Among other key points, *SSAP 50* distinguishes investment contracts from other insurance contracts. *SSAP 52* informs us that the income statement for investment contracts is to parallel the GAAP format. All other insurance contracts (traditional life, universal life, deferred annuities, accident and health, group, and so on) have an income statement identical to that which exists today for statutory.

SSAP 51 addresses life contracts. As do the other reserve-related SSAPs, this statement affirms the authority of the SVL, AOMR, ASPs and all of the actuarial guidelines. *SSAP 51* says deficiency reserves start from the paid-to point, not from the end of the current policy year. *SSAP 51* eliminates the cost of collection in excess of loading liability.

SSAP 54 addresses A&H (individual and group) contracts. It basically calls for the health model regulation that has been enacted, but not uniformly, in about half the states. It calls for a minimum reserve of gross unearned premium and also states that the reserves must make provision for all unmatured obligations.

SSAP 55 discusses provision for life and health claim reserves. It tells the user to fund for the cost of handling claims. Expenses to be provided for are both internal and external including direct and a provision for overhead.

SSAP 56 deals with universal life policies. The SSAP establishes the authority of the universal life model regulation.

SSAP 59 addresses credit insurance. It acknowledges that there is no effective NAIC model regulation so it goes into more detail. Hold the refund amount if higher than the reserve. Hold a gross premium reserve if necessary. For life, it recommends a Rule of 78 (R78) reserve or a mortality reserve. For A&H, it instructs the preparer to study the incidence of risk and select R78, pro rata (PR), mean of R78 and PR, or some other basis that reflects the pattern of insurance claims. Use the method selected for all contracts in this class.

Most of these SSAPs refer to specific appendices for the technical description of the reserve method. The appendices are a part of codification. For the most part, they recite verbatim provisions of NAIC model laws. The most significant appendices are:

- A–10, Health Model Regulation
- A–585, UL Model Regulation
- A–620, Accelerated Benefits
- A–641, Long-Term-Care Insurance Model Regulation
- A–820, Standard Valuation Law for Life and Annuity
- A–822, Asset Adequacy Analysis (AOMR)
- A–825, CARVM.

Conspicuously absent is any reference to *XXX*. The drafters specifically excluded this because it was controversial and not widely adopted. There is a possibility it may be added as part of maintenance prior to the effective date.

The preparer of codified statutory statements is to comply with all SSAPs, all regulations listed in the appendices, all actuarial standards of practice, and all actuarial guidelines promulgated by the NAIC.

Several other SSAPs are noteworthy.

SSAP 83 calls for the establishment of a deferred tax liability/asset (similar to GAAP) on the statutory balance sheet. This is likely to create a receivable, given that the DAC tax has caused a significant prepayment of FIT.

SSAP 5 addresses when to establish a liability. It reflects the fundamentals underlying GAAP *FAS 5*, which also defines what a liability is and when to recognize it.

SSAP 5 defines three classes of occurrence: probable, reasonably possible, and remote. The preparer establishes a reserve if it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. It is this verbiage, lifted from *FAS 5*, that has precluded the establishment of a failed New York Seven scenario cash-flow-testing reserve on the GAAP balance sheet. But now, this same wording exists along with Appendix A–822, which does call for the establishment of cash-flow-testing reserves if they exceed the formula-based reserves.

"The NAIC and the industry's interested parties have spent many years and millions of dollars to get this far. Here are the final implementation details."

The NAIC and the industry's interested parties have spent many years and millions of dollars to get this far. Here are the final implementation details.

The codification reserves would be established only on business issued after the effective date (currently January 1999 but likely deferred to January 2000). Business issued prior to codification's effective date would be reserved using state-of-domicile rules. Yes, this does imply several decades before reserves are consistently stated between companies.

There remains a chance that the resulting codification procedures may still not be certified by the AICPA as a valid accounting basis. A valid

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accounting basis is called an OCBOA (other comprehensive basis of accounting). Theoretically, an auditing firm could issue an opinion on a Moldavian basis as long as Moldavia's practices qualified as an OCBOA.

Codification may not become an OCBOA primarily because of the states' rights issue. Each state does not want to appear to give up anything when it comes to regulating insurance companies. To accommodate this, there remain several references to permitted practices and state variations throughout the codification document.

What this likely means is that the auditors would issue an audit opinion on the state-of-domicile rules, regulations, and permitted practices. The audit report would then contain a report or a footnote that reconciles state-of-domicile financials to codification financials.

Codification must be adopted by each state. About half the states would automatically adopt it. This is because the codification document was renamed the "Accounting Practices and Procedures Manual." This manual is currently referenced in the insurance regulations of half the states. The other half of the states must formally adopt codification. It has not been decided whether this is a regulation on the accreditation track.

After nearly seven years of work, it seems that we have been presented with a 51st accounting basis whose financial statements will be of little interest or value to anyone.

R. Thomas Herget, FSA, is Executive Vice President at PolySystems Incorporated in Chicago, Illinois and Chairperson of the Life Insurance Company Financial Reporting Section.

Bank Alliance Niche for Insurers

by Paul J. Sulek

Editor's Note: *The following is a summary of Session 79, "Bank Alliance Niche for Insurers," held at the SOA Annual Meeting in Washington, D.C. and moderated by Paul J. Sulek.*

A panel of guest speakers discussed the bank alliance niche for insurers. They included Julie Williams, Chief Counsel for the Office of the Comptroller of the Currency; Steve Landberg, Principal for Sibson & Company; and John Hillman, President of Philadelphia Financial Group. This session was sponsored by the Smaller Insurance Company Section. The objective of the panel was to discuss insurance product offerings of banks and to examine what insurers, especially smaller companies, can do to successfully market products in partnership with banks.

Julie Williams gave a brief history of bank regulation as it pertains to insurance activities. National banks currently engage in a wide variety of insurance and annuity activities. Ms. Williams pointed out that the issue of state and federal regulation of banks is not new. Recent Supreme Court decisions in *Barnett Bank of Marion County, N.A. v. Nelson, Florida Insurance Commission* and *NationsBank v. Variable Annuity Life Insurance Company* have resulted in an increased focus on bank insurance and annuity sales. These cases also resulted in new and challenging issues. State laws that apply generally to regulate insurance will apply to national banks provided the law does not interfere with authorized activities.

According to Steve Landberg, banks have seen a marked shift away from regular deposits in the last 10 years. The number of financial advisors in banks is growing, while the life agency population has shrunk. The smaller bank distribution channels are generally third-party marketers and branches platforms. Landberg said that until this time, banks have tended to deliver insurance or investment products rather than managing a customer relationship over multiple products.

One key to success is understanding the bank culture that is often focused on organizational issues. Almost 40% of banks currently sell insurance, but what and how they sell varies considerably. They plan to increase insurance sales to achieve greater profitability. Banks primarily sell individual annuities. Insurers need to have a long-term perspective to create bank alliances. Well-designed products, marketing, selling, and service are essential. These will need to be reengineered for bank distribution. Focused strategies and tight organizational alignment are keys to success.

John Hillman presented a case study focused on life insurance. The life marketer is a late arrival compared to annuity sellers. New entrants include insurance carriers with significant resources and patience; Internet companies that are highly focused with unique services; and direct marketers. Mr. Hillman said that opportunities exist in the bank market because this is a real, evolving market. There is an extensive customer database with possibilities for greater efficiency and profitability.

The challenges to insurers are to be recognized as a new distribution channel, to integrate with existing channels, providing focus on packaging, not features, knowing how to sell, and becoming aware of compliance requirements. To succeed, it is necessary to commit to the channel, be open to changing banker groups, consider new products, incorporate technology, focus within a segment, and be patient.

Paul J. Sulek, FSA, is Vice President and Chief Actuary at AGL Life Assurance Company in Blue Bell, Pennsylvania and a member of the Smaller Insurance Company Section Council.

Proposed Mutual Holding Company Legislation for Life Insurers

by Thomas P. Tierney

Editor's Note: *The following is testimony presented by the author to the New York State Assembly Standing Committee on Insurance.*

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The legislation proposed by New York Governor George Pataki (A.7057–A/S.5628) to allow a domestic mutual life insurer to reorganize as a stock company that is owned by a mutual holding company (MHC) should be rejected.

There are three general reasons why this proposal, if it were to be enacted, would be bad for the State and for the People of New York. They are:

1. The *question of who the current owners are, and in what proportions, of the mutual insurance industry needs to be answered* before a further modification (beyond the current Section 7312 demutualization provisions) of this ownership status question is addressed.

   In addition to current policyholders (whose ownership rights are acknowledged, albeit vaguely and without quantification, in the proposal), legitimate ownership claims could also be asserted (under equitable, abandoned property and other theories) by former policyholders, the insuring public, the State, and other governmental jurisdictions.

   With regard to current policyholders, note that there are problems in the proposed legislation with current voting rights and with ownership assignation.

   - Current voting rights, even if it is agreed that they are not inalienable (that is, it is agreed that current policyholder voters can collectively vote to extinguish or modify their future right to vote), should not be eliminated, a priori, before they are exercised one last time during a MHC reorganization election. This ex post facto approach, however, is exactly what will happen under the proposed "weight given to … vote" provision contained in the newly proposed Section 7908(b) of the Insurance Law. It could be argued that this section is, in effect, a "taking without compensation" of policyholder property and the subsequent giving of this property to the Superintendent. Moreover, once a new MHC is created, the new MHC voting rights referenced under Section 7910(b) will not be quantified on a policyholder-by-policyholder basis [as the Section 7917(c)(5) "specified" comment anticipates and as they must be if they are ever to be used thereafter]. The question should also be asked if the widows-and-orphans and mom-and-pop policyholders who now have the lion's share of voting power will be keeping same or will they be ceding it to the larger rich-individual and corporate policyowners.
   - Ownership assignation is totally ignored under the proposed law. More specifically, the question of how the property that the MHC owns (and, in particular, the 51%–100% stake in the new stock insurer) is allocated among the MHC's members is not addressed. The argument that this question can be answered later ignores the equity forfeiture and tontine implications that such a postponement would ultimately entail.

   With regard to former policyholders, the insuring public, the State, and other governmental jurisdictions, note that the proposed legislation presumes, in what appears to be an arbitrary manner, that these entities will never have any MHC membership interests. Consider that:

   - Former policyholders, under many reasonable ownership schema, could be considered as having left excess assets behind at the MHC predecessor, when their coverage ceased, and it could be argued that these remainder assets confer a MHC membership interest; this concept is more than just abstract theory since ERISA-qualified pension plans (which are in many ways economically similar to the cooperative nature of mutual insurance companies) will often grant surplus benefits to prior pension plan participants during a pension plan termination.
   - The State and other governments (as the recipients of escheated property of former policyholders and as the grantor of tax concessions and other benefits) and the insuring public (under social easement theory) could also lay a defensible (albeit one that is not necessarily irrefutable) ownership claim on a new MHC.

   Also note that the "we're an ownerless company" logic being proffered by the management of some mutual insurance companies could buttress an "if nobody owns them, everybody owns them" public facility ownership argument.

2. The *purported reason* that is usually advanced *for reorganization* as a domestic stock company, *access to capital markets, is bogus; the need simply does not exist.*

   In the grand economic scheme of things, the insurance industry is a supplier, not a demander, of capital and should not, at least permanently, be on both sides of the fence—nor does it have to be because a need for outside capital has never been demonstrated. Experience has proven that outside financing requirements, in those very rare occasions when they do arise, are always temporary and that they can be easily handled via a stock subsidiary, a bonding, or a surplus notes process.

   The concept of mutual insurance, in particular and almost by definition, precludes the need for outside capital since the premium structure of dividend-paying policies

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will normally have adverse-experience reserve capital built into it. Insurance policies premiums (according to actuarial science, good economics and the New York State Insurance Law) must be self-sufficient; and this means that outside capital, by design, should not be necessary. The premiums will deliver to the insurer whatever capital is needed to get the job done.

The real reason for the Article 79 reorganization proposal is to position the current mutual insurance industry management for a stock market killing (which would occur at policyholder and public expense), and the Assembly, I believe, should not allow such a perversion of the current not-for-profit mutual insurance process to happen.

3. The *mutual holding company concept itself is an organizational monstrosity*. It pits stockholders and the owners of mutual policies in a severe and nonsolvable conflict of interest; it effectively insulates company management from any reasonable accountability or outside oversight; and it is operationally awkward and comparatively expensive.

   The management that is running an MHC and its stock subsidiary management will always be torn between their opposing duties to participating policyholders (minimizing their premium outlay) and to company shareholders (maximizing their share value)—one contradicts the other and you cannot have both simultaneously. It is a fish-or-fowl situation; a company has to be either totally stock or totally mutual; in the former case, management has a debtor-creditor contractual relationship with its policyholders and a fiduciary duty to its shareholders; in the latter case, management's fiduciary obligations run to its policyholders and the relationship between them is of a trustee-and-beneficiary nature. Both approaches are valid, but the conflicting demands on management are such that they can not viably exist together at the same place and time.

   The "closed block" approach to dividends that is outlined in Section 7903(b)(1) of the proposed legislation is a good example of an idea that will never work because of an inherent policyholder/stockholder conflict of interest. Management cannot work to increase participating policyholder dividends (which will inevitably suppress stockholder profits) and, at the same time, be laboring under a duty to augment stockholder return.

   The 51% ownership requirement specified in Section 7917(c)(2) of the proposed legislation is another example of organizational inappropriateness. The purported "independence" rationale is a sham; if an unfettered and free market dictates that an acquisition is appropriate, then so be it. General superintendency powers and judicial review, as they now exist, ought to be sufficient to provide any extraordinary protection that might be needed. The real purpose of the 51%-ownership requirement is to insulate management from any takeover attempts. Think about it—they will have lifetime sinecures, be paid handsomely, and be granted get-rich stock options to boot. It is a great deal if you can get it, but the NYS Assembly should not be playing Santa Claus to a timid management that wants real-world rewards but without any of the attendant risk. By way of analogy, it is comparable to an election law change that would vest 51% of a district's voting power in a member and the member's friends and family.

What would really serve the public, and what I hope the assembly will consider, is a complete reworking of the current Section 7312 demutualization law. Such a review would be topical (given the pending Mutual of New York action) and it could address some very critical problems that Section 7312 shares with this proposal (such as the "who the current owners are," ownership assignation, and voting rights problems detailed above).

I thank this honorable committee for receiving this comment and would be happy, if requested, to assist it in any way.

Thomas P. Tierney, FSA, is a consulting actuary at Tierney Associates, Inc., in Framingham, Massachusetts.

The New York Seven: A Discussion of State Regulation of Mortgage Investment Portfolios

by Joel Lantzman

The Federal Financial Institution Examination Council (FFIEC) is in the process of eliminating a burdensome regulatory requirement of stress testing CMOs held by banks even though the stress tests and related projected cash flows are readily available through the Bloomberg system. The New York State Insurance Commission has a more complex set of analytic requirements still in place. The ability to develop the regulatory projected cash flows does not exist for most small insurers.

On my first visit to New York's state capital in Albany, I was impressed by the old and new standing almost side by side. The new athletic facility, which looks like a giant egg, is a short walk from the classic old capitol building with its two front entrances, an impressive structure where legislators argue about state budget numbers for months beyond the due date. New York State is obsessed with numbers and analysis to the point of being counterproductive. Built on the side of a small hill, the capitol building has one front door with 17 steps leading to the entrance. Around the other side, there are 76 steps leading to the other front door, in symbolic gesture to the fact that New York was one of the original colonies to declare independence in 1776. In my many trips to Albany, I saw only two people use the 76 steps. One was a maintenance man. The other had a towel wrapped around his neck and was emulating Rocky racing to the entrance of the Philadelphia Art Museum. All that effort and expense and nobody uses it! New York might have been better off if it had simply built one front entrance with 13 steps as a symbolic gesture to colonial days.

Legislators are greeted by this worship of symbolic numbers each day they arrive at the capitol building. It carries over into other areas of activity. New York has onerous laws pertaining to analytics that it requires insurance companies to perform on their investment portfolios. State law requires insurance companies to examine their U.S. government agency-issued collateralized mortgage obligations beyond the point of necessity or even practicality. And once done, who uses the results? Large insurance companies can afford entire departments of computer nerds who do nothing but churn out and analyze statistical data. For most of the smaller companies, many of which are not even domiciled in New York, this is simply an added layer of cost and confusion. Most do not have the ability to perform this work themselves and are forced to

pay outside service companies to develop the data. And then who uses them? An occasional maintenance man or a Rocky emulator! New York wants these small insurance companies to develop projected cash flows for seven different interest rate environment scenarios. The powers based in Kansas City who run the NAIC have since adopted New York's lead. States accepting the NAIC recommendation as their model also require the usage of the New York Seven.

Several scenarios are easy enough. A few entries into the Bloomberg system can provide monthly or annually projected cash flows in the event interest rates remain the same or rise 1%, 2%, or 3% or if they decline 1%, 2%, or 3%. Bankers throughout the country rely on the simplicity and efficiency of Bloomberg analytics either directly or through their brokers. But this does not satisfy the New York State Insurance Commission.

The commission wants to know how prepayments of mortgages will affect investment portfolio cash flows if interest rates rise 5% over the next 10 years. What if they rise 5% over the next 5 years and then fall to original levels over the following 5 years? It wants to know how mortgage prepayments affect portfolio cash flows if interest rates fall 5% over 5 years, then rise 5% over the next 5 years. And finally, what if rates fall 5% over 10 years? These four scenarios combined with constant rates, up 3% shock, and down 3% shock form the infamous New York Seven Scenarios.

Before beginning to calculate how mortgage prepayments affect future cash flow, we need to know how changing interest rates affect mortgage prepayments. The only thing any analyst knows with near certainty is that prepayments accelerate when interest rates fall and decelerate when rates rise. At best, to determine how much prepayment acceleration or deceleration will be felt, we can only make experienced guesses and estimates and then work from there.

For the simpler analytics required in the banking industry, Bloomberg solicits opinions on estimated prepayments from major mortgage professionals including Merrill Lynch, Credit Suisse/First Boston, DLJ, UBS, Paine Webber, Bear Stearns, Prudential, Lehman Bros, and Nations Banc. Because the projected prepayment rates provided by these experts rarely agree with each other, Bloomberg develops an average and provides median prepayment estimates for a constant rate environment and for rates up 1%, 2%, and 3% and down 1%, 2%, and 3%. In short, the projected cash flows and stress tests, which appear to be cast in concrete, are based on averages of estimates. These prepayment estimates are then used by Bloomberg to efficiently calculate stress test, yields, cash flows, duration, and average life for the bankers' seven scenarios.

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What about the 5% rate shifts that New York wants analyzed? Personally, I believe that shifts that large are almost irrelevant. If 30-year mortgages, currently at about 7.25%, fall to 4.25%, and there are people not motivated enough, smart enough, or able enough to refinance, will another 1% or 2% help? Maybe a little, but not much. Some people never refinance under any circumstances, but for those who do, the overwhelming majority of people who are inclined to refinance will not wait for a four- or five-point drop. Thus the scenarios that require analysis of 5% interest rate shifts create a lot of extra analytical work for very little added information.

The regulatory requirements were intended to reduce risk in investment portfolios. Ironically, in some cases, they actually create the exact opposite result. Many investment managers choose to avoid CMOs in order to avoid the required analytics. They then turn to lower-rated corporate bonds to obtain the required return on investment, thus increasing risk.

We have been able to supply CMO stress tests conforming to the Federal Financial Institution Examination Council (FFIEC) as required by the Financial Accounting Standards Board (FASB) for banks. Related projected cash flows are also readily available. The seven scenarios used by banks include constant, up 1%, 2%, and 3% and down 1%, 2%, and 3%. FASB has determined that banks should be managed by bankers, not by regulators. As a consequence, although the FFIEC stress tests will remain available as a tool, the FFIEC is working toward eliminating its usage as a regulatory requirement. Current projections of the effective date are approximately June 1998. It is time for the New York commission to do the same for the more complex, convoluted, notorious New York Seven. CMOs provide high yield with high safety of principal and interest. It is time that the small insurance companies be relieved of the extra financial burden imposed by the state.

Joel Lantzman is a licensed registered representative and a Senior Vice President at First Institutional Securities, LLC in Clifton, New Jersey.

by Anson J. Glacy

Confronting CMOs at Small Insurers

Much has been written in the financial press and the everyday media recently about the dangers of derivatives instruments in general and collateralized mortgage obligations (CMOs) in particular. CMOs are assets whose returns are based on pools of mortgages or mortgage-backed securities (MBSs). The recent decline in market interest rates has spurred a new wave of homeowner refinancings, exposing CMO investors to substantial market risk. For small insurers, CMOs pose special difficulties, especially in the areas of asset adequacy analysis and asset/liability work. The complexities associated with modeling these assets can hinder the cash-flow-testing process and compromise the credibility of its conclusions. This article briefly describes the nature and features of CMOs, identifies their key risk factors, and suggests some steps small insurers can take to effectively and economically model them.

The Nature and Risks of CMOs

From the standpoint of the investing insurance company, MBSs are particularly desirable because of attractive credit-risk characteristics, good liquidity arising from a large secondary market, ease of access to the mortgage financing marketplace, and favorable risk-based capital treatment. Government agencies (such as the Government National Mortgage Association, the Federal National Mortgage Association, and the Federal Home Loan Mortgage Corporation) package, issue, and guarantee the vast majority of MBSs. CMOs alter the basic pro-rata nature of how MBSs return principal and interest by channeling returns into *tranches* (the French word for *slice*). The timing and amount of cash flows are based on the priority of individual tranches within the overall structure. For example, a CMO deal might include a *planned amortization class* (PAC) and a *support* (or *companion*) tranche (see Table 1 on page 11 for a brief taxonomy of some commonly encountered tranche types). In order to achieve the planned amortization schedule in the PAC tranche, any excess or shortfall in prepayments must first be absorbed by the support tranche. As a result, while the PAC tranche has relatively low prepayment risk, the support tranche is fraught with it.

The Challenge for Small Insurers

How can small companies successfully deal with such complex instruments? A number of vendors (for example, Capital Management Sciences, Global Advanced Technology Corp., and Intex Solutions, Inc.) offer sophisticated database packages that handle the complex rules that govern the distribution of cash flows to the individual tranches. Unfortunately, the price of these packages usually puts them out of the reach of most small insurers. However, there are a variety of expeditious approaches that can be used to successfully model CMOs on an economical basis.

Service Bureaus

A number of reputable service organizations (such as Ernst & Young LLP) will act in a "service bureau" capacity to model specific CMO holdings for cash-flow testing or other risk assessment exercises. These service bureaus typically are licensed users of the database packages mentioned above, and this approach constitutes a cost-effective way of gaining access to the power and rigor of these packages. For example, a small insurer using the PTS® software as its modeling platform would transmit to the service bureau a CUSIP-by-CUSIP listing of its CMO holdings. Then, using the Valuation Data File (VDF) facility of PTS®, the service bureau would deliver electronic files of aggregated portfolio projections to the insurer that easily integrate into its PTS® business models. The TAS Tillinghast Actuarial Software™ permits similar functionality

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through its externally projected assets (EPA) facility.

Service bureaus also can be valuable advisors to the small insurer on CMO-related modeling issues, assumptions, and settings. For example, they can assist in reviewing and interpreting complicated CMO prospectuses, establishing prepayment assumptions, and addressing the particular modeling challenges of some of the more exotic tranche types.

Synthetic Asset Approach

CMOs are complex assets, highly dependent on marketplace interest rate movements and homeowner refinancing activity. However, if armed with some basic analytics of the CMOs at hand, the small insurer can successfully construct synthetic assets that effectively simulate the performance of the CMOs. For example, the well-known analytics of *duration* and *convexity* succinctly capture a CMO's sensitivity to interest rate movements (although some tranches like IOs can be notoriously unstationary in this respect). If computed correctly, these analytics also reflect underlying homeowner refinancings, as this activity is closely linked to changes in interest rates. Using its own modeling platform, the small insurer might then construct a synthetic asset with similar duration and convexity analytics. This synthetic asset would also match other important characteristics of the CMO (for example, coupon rate, average life). A suitably configured callable sinking-fund bond is the typical choice for such proxy service.

External Sources

Firms with which the small insurer has business relationships can also assist with its CMO challenge. For example, either the insurer's external investment adviser or the CMO dealer quite often possesses advanced asset modeling systems (for example, GAT Decision™), which these firms might employ for the benefit of the insurer. In addition, a number of Internet-based services are appearing that offer valuable pricing information and market data to the small insurer at an economical cost. Some of these worth investigating are:

- Bond Market Gateway at http://www.psa.com/investor.htm
- Quote.Com at http://www.quote.com/
- Bonds Online at http://www.bondsonline.com/
- BondTrac at http://www.bondtrac.com/
- CMS BondVu at http://www.bondvu.com/

Finally, the venerable Bloomberg offers a portfolio cash-flow facility (PCF < GO >) that projects expected interest and principal from a CMO. Many small insurers find they can easily gain access to a Bloomberg terminal. In addition, Bloomberg functions are now available directly through the World Wide Web, which might put them within reach of small insurers.

Anson J. Glacy, Jr., ASA, is a consulting actuary with Ernst & Young LLP in Hartford, Connecticut.

TABLE 1
A CMO Taxonomy

Planned Amortization Class (PAC)	Tranche that pays principal and interest according to a predetermined schedule. PACs usually have priority over other tranches and are generally the safest.
Targeted Amortization Class (TAC)	Tranche that pays principal and interest according to a predetermined schedule but with less predictability than a PAC.
Very Accurately Defined Maturity (VADM)	Tranche having a precise maturity date.
Companion or Support Bonds (SUP)	Tranche supporting defined amortization tranches such as TACs and PACs. Payment of principal is subordinated to other tranches.
PAC II Bond	Companion bond supported by its own companion or support tranche.
Sequential Payment Bond (SEQ)	Tranche receiving principal payments after a previous tranche has been retired.
Principal-Only Bond (PO)	Tranche receiving only the principal portion of the mortgage's cash flow.
Interest-Only Bond (IO)	Tranche receiving only the interest portion of the mortgage's cash flow.
Floating Rate CMOs	Tranches whose yields depend on LIBOR. Examples are floaters (float directly with LIBOR), super-floaters (float directly but in some multiple of changes in LIBOR), and inverse floaters (float inversely to LIBOR).
Residual	Tranche that receives cash flow left after all other tranches and administrative costs have been paid.
Z Bond	Accrual or accretion tranche that pays no interest or principal until all previous tranches have been paid (except for any payments due to residuals). Interest accrues and principal payments usually begin 10 to 15 years after the CMO is issued.
Jump Z Bond	Z bond that can be converted to an interest-paying bond earlier than normally under certain specified conditions.

Mutual Insurance Holding Companies: An Update

by Christian J. DesRochers

The widespread adoption of mutual holding company legislation and the recently released NAIC Draft Report on Mutual Insurance Holding Company Reorganizations have focused increasing attention on the issues surrounding the mutual holding company structure and the future of mutual life insurance companies generally.

In 1996, approximately 90 mutual life insurance groups filed life insurance NAIC annual statements. Mutual life insurers make up approximately one-third of the U.S. life insurance industry when measured either by assets or capital and surplus. Although the 10 largest mutual insurance groups hold approximately 85% of total mutual assets, small companies are a significant segment of the total mutual population. For example, half the total number of mutual groups have assets of $500 million or less.

The management challenges faced by mutual life insurance companies generally, and small mutual life insurance companies specifically, are well-documented. Access to capital continues to be a critical issue. Because mutual life insurance companies are owned by their policyholders, mutual life insurers have few options to raise capital other than that internally generated by operations. These options may include the issuance of surplus notes, the formation of downstream subsidiaries, financial reinsurance, and demutualization.

However, the alternatives outlined are not generally viewed as solutions to the long-term capital needs of mutual life insurance companies. Downstream subsidiaries are limited in their ability to pass capital upwards to the parent insurer and require that profitable nonmutual subsidiaries be available to put in the downstream company. Surplus notes are restricted to a percentage of surplus and ultimately must be repaid. Demutualization, in which a mutual life insurer is restructured into a stock company, is time-consuming, administratively complex, and expensive. For example, it has been reported that Equitable spent more than $40 million on demutualization. Demutualization also forces the timing of an initial public offering (IPO) to recapitalize the company, and little new capital (that is, in excess of that distributed to policyholders) is generally raised in a demutualization. Finally, demutualization changes the character of the organization from a mutual company to that of a stock life insurer.

Mutual Insurance Holding Companies

In the last two years, several states have enacted legislation permitting mutual insurers (both life and property/ casualty) to form mutual insurance holding companies (MIHCs). These states include California, Florida, Iowa, Kansas, Louisiana, Minnesota, Missouri, Montana, Ohio, Oregon, Pennsylvania, Rhode Island, Texas, Vermont, and the District of Columbia. Legislation is pending in Illinois, Indiana, Massachusetts, New York, and Wisconsin.

The first MIHC statute was passed in Iowa in 1995, so mutual insurance holding companies are relatively new phenomena. The statutes are generally patterned after the process of reorganizing mutual savings associations. Companies that have either adopted or announced that they are adopting the MIHC structure include AmerUS (formerly American Mutual), Principal, Acacia, General American, Ohio National, Ameritas, and Pacific Life (formerly Pacific Mutual).

Mutual insurance holding companies may prove to be a key capital restructuring tool available to mutual life insurance companies. Because of their advantages over a traditional demutualization, MIHCs may also be a way for smaller mutual life insurance companies to gain needed flexibility in their capital structure, without the time and cost of full-scale demutualization. At the same time, however, opposition to MIHCs has arisen from some consumer advocates and others, and the threat of class-action litigation is present in MIHC conversions. Recent legislative activity has been marked by increasing debate between proponents of MIHCs and their critics over the rights of policyholders under the mutual holding company structure. The outcome of the debate may ultimately determine the viability of the mutual holding company as an answer to the capital needs of mutual life insurance companies.

Policyholder Rights under an MIHC

A policyholder of a mutual life insurance company is traditionally considered to have three separate interests in the company:

- Membership rights, which include the right to receive dividends and to elect the company's board
- Ownership rights, or the right to receive the value of the company in a liquidation (that is, a demutualization)
- Contractual rights, which include the right to receive benefits guaranteed in their policies, and "reasonable dividend expectations."

Under an MIHC restructuring, the (former) mutual life insurance company is split into two entities, an upstream general purpose corporation and a stock insurance company subsidiary. A variation is to create three entities, with an intermediate holding company between the MIHC and the stock life insurer. This allows the intermediate holding company, rather than the stock life company, to issue stock. The MIHC is a shell that does not engage in the business of insurance, but holds the shares of the stock life insurance company subsidiary that serves the members of the MIHC.

Policyholder rights are also separated. In an MIHC, the membership and ownership rights are transferred to the MlHC, while the contract rights reside in the newly converted stock life subsidiary of the MIHC. THE MIHC does not issue stock. Rather, the ownership of the MlHC is represented by the membership rights that the policyholders of the former mutual life insurer receive, which entitle the members to vote for the members of the board of

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directors of the MIHC. After the restructuring, all the life insurance is issued in a stock life insurance company. New policyholders may or may not have the same membership rights as the old policyholders. Typically, states require that the MIHC hold at least 51% of the (restructured) stock life insurance company. After conversion, the MIHC holds all the stock of the downstream companies; future stock sales are carried out by an IPO.

The contractual interests of the existing participating policyholders are often supported by a "closed block" of assets held in the stock life insurer. The closed block involves an allocation of assets that, with future premiums, is sufficient to pay the policies' guaranteed benefits and the dividend scale, in effect, at conversion if the current experience remains unchanged. A closed block is a device that has been used in a traditional demutualization to support the future dividend expectations of the policyholders at the time of demutualization. The policyholders are also given priority on the assets of any intermediate holding company in an insolvency.

Advantages

Proponents of the MIHC structure see it as an ideal method of providing needed access to the capital markets for mutual life insurance organizations, while preserving the basic mutual structure of the organization that would be lost in a demutualization. The formation of a MIHC is faster and less costly than a traditional demutualization. Because the MIHC restructuring retains existing surplus in the stock life company without a distribution to policyholders, they retain their majority interest. This reduces the threat of a takeover and allows the MIHC to retain its mutuality while providing access to capital. Thus, the MIHC structure allows the former mutual life insurer to enter capital markets and preserve its mutual heritage and independence.

An MIHC retains the flexibility to demutualize in the future. However, it does not force timing of an IPO as in a demutualization. This is said to be better for policyholders because the stock of demutualized insurers has at times come to market at a significant discount to total book value. If policyholders who receive stock sell their shares immediately, they do not realize the full potential value. Therefore, an MIHC allows better selection of market timing for demutualization. Under an MIHC, an IPO could also be done at the intermediate (stock) holding company level, so all the proceeds need not to go to a life company. Any capital raised by the MIHC is in addition to existing surplus. Unlike a traditional demutualization, the stock insurance company has no need to recapitalize after a MIHC conversion.

In addition, the MIHC structure provides flexibility in acquisitions, mergers, and other corporate transactions. For example, it may simplify acquisitions of other companies using stock rather than cash. In addition, the MIHC structure will better prepare mutual life insurance companies for broad-based reform of financial services (for example, the merger of Travelers and Citicorp), as it provides the ability for a MIHC to restructure into affiliated groups that contain insurance and noninsurance companies, thereby decreasing regulatory costs. Currently, downstream companies are generally direct subsidiaries of the parent mutual life insurance company.

Finally, an MIHC structure can facilitate cultural change as it allows for the compensation of management with stock and stock options, thus retaining key managers.

Criticisms

Opposition to the MIHC legislation has generally come from consumer advocates. However, in early 1998, a group of stock life insurers formed a group called Companies for Demutualization Fairness to lobby against the MIHC legislation. These stock companies view MIHCs as unfair to stock companies because they cannot be acquired and potentially dilute the value of other insurers' stock. In addition, the stock companies argue that mutual conversions are unfair to policyholders and are not necessary because the option of a traditional demutualization still exists.

The key issue in the debate over mutual insurance holding companies is the nature of the policyholders' interest in the (former) mutual life insurance company after restructuring. When a mutual company is demutualized, policyholders receive a distribution of cash and/or stock that represents their equity interest in the company. Critics of the MIHC structure, which include Joseph M. Belth, professor emeritus of insurance of Indiana University, and Jason B. Adkins, formerly executive director of the Center from Insurance Research in Cambridge, Massachusetts, point out that although the former mutual has been converted to a stock company, policyholders receive none of the stock. While the surplus of a mutual life insurer is held for the sole benefit of the policyholders, the equity shareholders of an MIHC have a claim on the insurer's surplus that is no longer held for the exclusive benefit of the policyholders.

Although the closed block of assets is designed to preserve dividends on policies, critics argue that it represents only part of the value that policyholders receive in a demutualization. The benefit of an increase in share price only goes to those policyholders who were offered and subsequently purchased the stock. In their view, the closed block does not give policyholders the financial benefits of the new company that they would receive in a demutualization. Thus, say the critics, while the ultimate outcome of a demutualization and a conversion to an MIHC are the same, the policyholders in an MIHC conversion do not receive any compensation for the loss of value. Compared with demutualization, no cash is distributed. Thus, say the critics, in an MIHC the closed block operates to the detriment of the policyholders and not to their benefit.

Critics also argue that the MIHC statutes effectively deregulate much of the MIHC activities. By allowing a more complex corporate structure, the MIHC structure further weakens the ability of policyholders, regulators, and the courts to hold management accountable. A conflict of interest may exist because, unlike a typical stock corporation, the MIHC has two distinct sets of owners and one management group. In theory, the goals of the equity shareholders may conflict with those of the policyholders. The policyholder/owners want higher dividends, while shareholders want higher profits.

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In response, proponents of the MIHC structure point out that the ownership interests are not extinguished, and therefore policyholders have not lost any value. Ultimately, the success of the insurance company depends on the values that it provides to its policyholders. Therefore, shareholder interests and policyholder interests are aligned.

The March 1998 draft NAIC report, "Mutual Holding Company Reorganizations," appears to adopt a view that is aligned with that of the critics of mutual holding companies. Telling comments in the NAIC report include "on its face it seems that having a right to cast votes for management of a MIHC is inadequate compensation, by itself, for total extinguishment of members numerous rights in the mutual insurer" (p. 32) and "proponents of an MIHC option have been unable to identify a legal means to send the profits of those companies on top of the stock insurer back down to the policyholders of the stock insurer who also comprise 100% of the membership of the MIHC" (p. 33). The NAIC draft is not without its critics, even within the NAIC, and may not be finalized in its current form, but it seems to take a strong position in favor of some participation in the profits of the downstream companies by the owners of the MIHC. Were this position to ultimately prevail, it would remove one of the major cost advantages of the mutual holding structure over full demutualization, as some means would be needed to allocate the ownership of the MIHC to individual members, a process that can be very time-consuming and expensive.

The Future

Recent developments have signaled that a major restructuring of mutual life insurance companies is under way. However, even before the NAIC draft report, there were mixed signals about the future of MIHCs. Several large mutual life insurers, including the Prudential, Standard Life, and Mutual of New York, have indicated their plans to go with traditional demutualization and not an MIHC. At the same time, Principal Mutual and others are continuing toward adoption of an MIHC structure, and the Metropolitan has shown a strong preference to restructure using an MIHC.

One proposal made during the debate over MlHCs in New York would restrict the use of the MIHC structure to a limited period as an interim step toward demutualization. An MIHC would be required to have an IPO within three years of its formation. The proceeds of the IPO would be distributed to the policyholders. Supporters of the proposal argue that the method allows the market to establish the value of the ownership interests, while allowing management to control the timing of the public offering.

Although several of the Canadian mutual life insurance companies, including Manulife and Mutual Life of Canada, have announced their intention to demutualize, these appear to be traditional demutualizations.

Whether the threat of policyholder class-action lawsuits, the actions of Prudential and others in moving toward a tradition form of demutualization, or additional restrictions imposed by the NAIC will affect other mutual companies restructuring under the MIHC form remains an open question. However, it is safe to predict that the debate will continue as will the pressure on all mutual life insurers, both large and small, to find the capital structure that is appropriate for their policyholders as they prepare to enter the 21st century.

Christian J. DesRochers, FSA, is a Partner at Avon Consulting Group LLP in Avon, Connecticut and Vice-Chairperson of the Smaller Insurance Company Section Council.

Back-to-Basics: Which Duration Is Best?

by Teri Geske

Editor's Note: *The following article is reprinted from the May 1997 issue of* On the Edge, *the monthly newsletter of Capital Management Sciences, and is reprinted with permission.*

Over the past 10 years, most fixed-income professionals have come to rely on duration as the primary measure of interest rate risk. Yet this widely accepted concept is still subject to misinterpretation and misuse because there is more than one form of "duration" out there. In this Back-to-Basics article, we review some of the different types of duration in use and the implications of relying on the wrong one when managing a portfolio's exposure to interest rate risk.

There are (at least) three types of durations which might be used to describe a bond and/or portfolio's sensitivity to changes in interest rates: Modified (Macaulay's Duration; Effective Duration (also known as option-adjusted duration); and Duration-to-Worst. These are defined as follows:

- ***Modified Duration.*** The percentage change in a bond's price given a change in its yield, assuming the investor receives a fixed set of cash flows (principal and interest payments) to the bond's final maturity date.
- ***Effective Duration.*** The average percentage change in a bond's price, given an upward and downward parallel shift in the Treasury (spot) curve, where the change in price reflects any exercise of embedded call or put options, optional prepayments, and/or changes in adjustable rate coupons according to formulas which may include periodic or lifetime rate caps/floors, etc.
- ***Duration-to-Worst.*** (Note that for puttable bonds, one would use a "duration-to-best" computed from cash flows to the maturity date or to the put date, whichever results in the highest yield to the investor.)

The primary objective of duration is to explain a bond's or portfolio's price sensitivity to changes in interest rates; however, *neither Modified Duration or Duration-to-Worst can be used for this purpose, because neither one reflects the fact that a bond's cash flows can change in response to a change in interest rates.* Modified Duration assumes a bond will survive to the stated maturity date, regardless of any call or put options (or in the case of a mortgage-backed security, that prepayments will be received according to a single, static forecast expressed in terms of PSA% or CPR%). This approach ignores the value of the embedded option(s) and thus overstates a bond's actual price sensitivity to changes in interest rates. If Modified Duration is used to compare a portfolio's interest rate sensitivity relative to a benchmark and the portfolio (or benchmark) contains securities with any type of embedded options, a significant tracking error is likely to occur.

"The primary objective of duration is to explain a bond's or portfolio's price sensitivity to changes in interest rates; ..."

How about using Duration-to-Worst? Even though Duration-to-Worst appears to recognize the presence of an embedded option, it does not reflect the fact that the value of the option fluctuates as interest rates change. Therefore, Duration-to-Worst also misestimates a bond's or portfolio's interest rate sensitivity and can be a highly unstable and misleading measure. Consider a bond which is callable one year from now at a price of 102, currently priced at 102.484. The yield to the first call date (which is the worst call date in this example) is 7.60% versus a yield-to-maturity of 7.80%, so the bond is trading to call. The bond's Duration-to-Worst is 0.94, reflecting the time to call that Duration-to-Worst assumes will be exercised with certainty.

Note that the embedded call is essentially "at-the-money"—a small rise in interest rates would cause the bond to "crossover" and trade to maturity. If rates rise by only 10 bps, the bond's yield-to-maturity would be slightly lower than its yield-to-call; therefore, the Duration-to-Worst would be based on the cash flows to the maturity date (and equal to the Modified Duration), jumping from 0.94 out to 5.61. Of course, neither Duration-to-Worst nor Modified Duration provides a good indication of the actual change the bond's price would experience given the 10 bp parallel shift in the yield curve; for this, we must use Effective Duration, which reflects the change in value of any embedded options on the bond's price.

Although Duration-to-Worst is not an accurate measure of interest rate risk for securities and portfolios that contain embedded options, it is commonly used in the municipal market. This may be due to the fact that municipal portfolios have traditionally been managed to maximize reported yield, rather than on a total-return basis. In last month's *On the Edge*, we discussed how the average tax-exempt bond mutual fund has underperformed its benchmark over the past decade. We proposed the hypothesis that relying on Duration-to-Worst has caused a widespread misestimation of the interest rate sensitivity of these funds, leading to this pervasive underperformance. Duration-at-Worst is also used by those who do not have access to the modeling tools needed to compute Effective Duration.

Effective Duration is the only one of the three duration measures discussed here which reflects the impact of embedded options on a bond's interest rate sensitivity.

Teri Geske is Vice President, Product Development at Capital Management Sciences in Los Angeles, California.

Approach in Drafting a Unified Valuation Law—Issues without End

by Norman E. Hill

"Start with a clean slate and develop from scratch a completely new valuation law." This was basically the charge from the NAIC's Life and Health Actuarial Task Force to a new task force of the American Academy of Actuaries. This latter group has met to try to fulfill its charge. One goal is to prepare a complete draft of a new law by the June 1998 NAIC meeting.

As a member of this task force, I have taken an approach to drafting the new law. Because of my company affiliation, I have particular interest in how such a law would affect smaller companies with limited resources. Nonetheless, I hope I am keeping a broad industry perspective. In this article, all opinions are my own, and not those of the Academy task force.

So far, some members have summarized broad concepts that should exist in a new law. Instead, I have chosen to go further and prepare a complete legal document for valuation. Even here, in a complete document, I do not yet claim to have complete answers, much less opinions, on the host of practical and theoretical questions that must be addressed fairly soon.

General Approach

My starting point was the existing standard valuation law and regulation of one state chosen at random. I removed all references to specific assumptions in my new standard law and regulation drafts. Also, I added the following new sections:

- Law—Method of Valuation, which defines the new approach to reserves. The defined net premium method (similar to the gross premium reserve method) is intended to be applicable to single-premium policies, such as SPDAs, credit, and so on, as well as annual premium policies.
- Regulations—Under Required Opinions, new sections on applicable percentage, assumptions, assumption adjustments under method #2, and risk profile. The purpose of the applicable percentage is to limit the extent of actual deferred acquisition expenses, similar to the CRVM allowance.

In addition, I have eliminated the phrase "life" when it appears in front of "insurance company."

I drafted a model law and regulation that call for defined net-premium reserves with actuarial judgment substantially substituted for formula reserves and specified ranges of assumptions. To answer questions of "best estimates," "margins," and "reasonable conservatism," I have included two options. The first calls for assumptions that provide an 85% confidence level. The second calls for starting with best estimate current assumptions and then grading to 90% or 110% of the base, as appropriate, in 15 years.

In our discussions, several parties stressed that reserves should allow profits to emerge gradually each year. Because they front-end profits, this objective rules out gross premium reserves. A net premium approach leaves at least two options: compute net premiums on an issue-age basis using the same assumptions as present values at attained ages, or predefine net premiums by backing out predefined profit margins. This is similar to a dilemma that has plagued companies attempting to adjust historical GAAP reserves over to purchase accounting reserves.

Actuarial Opinions

One proposal has been for an actuarial opinion stating an *X*% confidence that reserves are "correct" or will not vary more than some range, such as one standard deviation from the mean or, say, 10% either way. However, an approach providing a desired confidence level inherently requires stochastic processing and a great many repeat valuations. This can mean hundreds or thousands of duplicate valuations applied to a single in-force file. The resulting computer complexity, computer run-time, and drain on limited resources would cause a storm of protest from many small companies (including mine) and others as well. Perhaps, there is a common-sense approach that would allow actuarial opinion stating *X*% confidence without going through the above, elaborate routine. However, I do not believe that it is supported in current standards of practice.

Some proposals have been for "reasonable conservatism" as opposed to "best estimate" or "bare bones." Note that the current standard of practice for gross premium reserves refers to "best estimates." This alone would be unacceptable to many regulators and would seem to conflict with the tradition of statutory accounting.

Therefore, I provided the above alternative for reaching desired conservatism in reserve assumptions. It calls for a two-step process:

- Start with best-estimate current assumptions
- Grade these assumptions to a 10% more conservative level. Depending on the nature of the assumption, this may involve grading to 110% or 90%. I chose a 15-year grading period, although others are possible.

Actuarial Assumptions

A critical question is determination of actuarial assumptions. My approach calls for assumptions that are closer to GAAP than traditional statutory. Lapses would be included, along with mortality assumptions. Expenses and commissions would also be included. As a starting point, these variables should be based on each company's experience, followed by adjustments to achieve either *X*% confidence or the above-mentioned grading.

The next critical question is which standards should be in place for setting actuarial assumptions. One proposal is that this should be left completely to the professional judgment of the valuation actuarial. Even here, however, standards for setting assumptions would be governed by the Actuarial Standards Board (ASB). My approach is to rely on the ASB for this purpose. However, I have specified in my drafted law that

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its standards must be definitive. Vague statements such as "the actuary should consider" are not enough. Guidance must be more specific. In the 1960s, the profession faced a similar controversy over a proposed textbook standard for pension actuaries. Unfortunately, before resolution the issue was preempted by ERISA legislation.

ASB positions would have to deal with both assumptions and methods. Controversial areas of methodology such as for term reserves, equity- indexed products, annuity benefit streams, and others would have to be addressed in considerable detail.

In my regulation draft, I have included a very broad array of areas in assumptions that need specific guidance from ASB. I do not believe that regulators would be willing to conform to actuarial judgment without such a considerable preparation of standards.

When I called for assumptions closer to GAAP, I was referring to GAAP under the original Audit Guide and *FAS 60* issued by the Financial Accounting Standards Board. Even here I am proposing another significant deviation. Traditional GAAP calls for the lock-in approach to assumptions. Except for expense recoverability problems and (possibly) health insurance rate increases, assumptions for each issue year are not changed. Instead, I propose that assumptions be updated each year. In general, the array of assumptions should be appropriate for new business. For existing business, that is, say, at duration 10, the new business assumption for duration 10 would be applied. However, this general approach would need modification if underwriting standards, for example, have changed over the 10 years. Also, there is a serious question of whether smaller companies can readily reapply new business assumptions to all in force.

When we refer to current GAAP, it is with the understanding that most companies are governed by *FAS 97*. For annuities and universal life, full account values are required for reserves, with no reliance on actuarial judgment in setting assumptions. I have deliberately departed from any reference to this version of GAAP.

Scope of New Law

My intention was that a defined net- premium approach would apply to all lines of business. This would include single-premium annuities and credit insurance, with zero net premiums.

The Task Force charge is for a valuation law that applies to all liabilities for life, annuities, and health. This means that standards are needed for active life reserves (including unearned premiums) and claim reserves. If the description of present values of benefits includes incurred, unaccrued, and not yet incurred, these can be covered by a general classic prospective reserve formula.

Even more broadly, the charge appears applicable to both life and property casualty insurers. The main liability of the latter company is claim reserves, referred to as "loss reserves." If so, the law's standards for preparing claim reserves have to be expanded to include property casualty loss reserves and loss adjustment expense reserves.

There is a question of whether complete GAAP reserves or their equivalent should be included in statutory financial statements. The entire tradition of statutory accounting is that front-end acquisition expenses are immediately charged off. It is true that CRVM reserves and two-year preliminary-term reserves for health insurance do provide a limited expense deferral. However, full GAAP reserves, including a deferred-acquisition cost (netted or shown as a separate asset), would be a significant departure.

In my draft I have stated that only a percentage of acquisition expenses would be included in financial statements. In other words, only 25% or some defined percentage of a total deferred acquisition cost would be netted against reserves or shown separately. This limitation on acquisition expenses is more consistent with the broad thrust of statutory accounting.

Asset Adequacy

One key portion of my approach is expansion of asset adequacy in setting reserves. My draft requires that all companies, both large and small, file actuarial opinions that include asset- adequacy analysis. However, I have specified in the law that such analysis is *not* synonymous with cash-flow testing. In other words, I have eliminated the difference between Section VII and Section VIII opinions, but with some restrictions to reassure small companies.

Several regulators have complained that Section VII reserve opinions avoid any question of invested assets underlying reserves. Their complaint is that, with so many interest-sensitive products sold today, valuation actuaries must always consider the link between reserves and invested assets.

Many smaller companies are strongly opposed to elimination of Section VII opinions. However, I believe that the main reason for this attitude is fear that "asset adequacy" inherently equates to cash-flow testing. The law does not specify this tie, but does not rule it out either. Small companies complain that Section VIII opinions are unduly burdensome and provide minimal value. I believe that their main objection is to blanket requirements for annual cash-flow testing.

"Small companies complain that Section VIII opinions are unduly burdensome and provide minimal value. I believe that their main objection is to blanket requirements for annual cash-flow testing."

Instead, I am proposing that the need for cash-flow testing for a company of *any* size should be governed by its risk profile of assets, liabilities, and products. I have included specific trigger points in the regulation that would require cash-flow testing. These are based on relatively large product mixes of annuities, universal life, or outside-indexed life or annuities. They are also based on large asset mixes of volatile CMOs with high "flux" scores or illiquid assets such as real estate or commercial mortgages.

These trigger points vary somewhat by company size, so that the traditional four categories in the current law, A

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through D, are retained. Even here, I have specified that actuarial judgment in each company situation may still require cash-flow testing, regardless of the above risk profiles.

Regulatory Review

An important question is the extent to which actuarial reserves based on judgmental assumptions would be subject to regulatory review. Only a few state insurance departments have the resources to conduct such a review of all domestic companies (let alone of all licensed companies).

Tied in with this concern is the question of the proper status of valuation actuaries. In some European countries, these actuaries appear to be quasi-regulators rather than members of management. In the U.S. of course, company actuaries are members of management. Consulting actuaries are agents of management. Regulatory actuaries are insurance department employees and are not tied to companies.

A third related issue involves possible review of the new type of actuarial opinions by a new, designated regulatory body or an expanded division of the NAIC. There is a very sensitive question of whether states are willing to delegate their legal powers to an outside agency.

To answer all these related concerns, my proposal is to retain the basic, current U.S. approach. Company actuaries would be accountable to their own management and, in a professional sense, to the ASB. Each state would retain the power to review or challenge any actuarial opinion. In addition, as a normal annual process, the NAIC would be charged with limited, prescribed reviews of all actuarial reserve opinions. However, this review would be limited to the completeness of each opinion's assumptions and documentation. The NAIC would report to each domestic state only those opinions deemed to be incomplete. It would then be up to each state to ask companies for more information about problem opinions.

Even this type of limited review would require an expansion of NAIC (or other body) actuarial resources. However, it could still serve to retain current prerogatives of each state.

General Considerations

For reinsurance, I have included a requirement that the actuary of the ceding company must be satisfied that the assuming company is holding appropriate reserves on the ceded block. My thought was that the assuming company would provide some type of statement and description about its reserves to the ceding company. One complaint against New York's Regulation 20 for "mirror image" reserves is that ceding and assuming companies can legitimately set different reserve assumptions for the same block.

One objection to my approach on reinsurance could be that the valuation actuary should merely be satisfied that the assuming company is in sound financial condition. My own preference is to go beyond this, so that some comfort about the magnitude of assumed reserves is provided to the ceding company.

I have not included any specific legal protection for actuarial liability. Many consultants and other actuaries are very concerned about the lack of such protection in the current law. They believe that if actuarial judgment is allowed in setting reserve assumptions, legal protection is even more crucial.

Unfortunately, at this stage, even the entire insurance industry has not persuaded Congress to allow insurance liability caps. Therefore, I question the practicality of attempting to limit actuarial liability in a valuation law.

Risk-based-capital calculations are an important part of statutory financial statements. Reserves are an important part of these calculations. If the valuation law is changed, it is likely that the bases for risk-based capital would also automatically be changed.

It is unlikely that federal income tax calculations can be built into a standard valuation law. However, the implications of reserve changes and possible tax impacts should always be kept in mind.

I added another section dealing with new business projections. This is to satisfy another objective of a new valuation law for dynamic financial information. New business projections would use reserve assumptions along with the added key assumptions of new business volume and mix. The actuary would need to be satisfied that the company's financial condition would remain sound under new business conditions. If acquisition expenses are completely deferred, the traditional trigger of statutory surplus strain would no longer be present. Therefore, the extent of asset adequacy, specifically, *invested* asset adequacy, would have to be included in such projections.

Conclusion

Within the industry and among regulators, there are a host of differing and conflicting opinions and objectives for a valuation law. There is a serious question of whether it is possible to prepare a new valuation law and achieve even widespread agreement, let alone consensus. I have prepared a completely new law, based on my own background and experience. I hope the description of my approach as provided in this article will serve to stimulate discussion among smaller companies, as well as other parties, and help foster greater agreement.

Norman E. Hill, FSA, is Senior Vice President and Chief Actuary at Kanawha Insurance Company in Lancaster, South Carolina and a member of the Smaller Insurance Company Section Council.

Modeling CMOs

by Dale Hall

In a small life insurance company setting there is always a push and pull between the analysis that needs to be performed and the costs of getting that analysis done. This question again rears its ugly head when dealing with the problem of testing the adequacy of the company assets through cash-flow testing.

The assets of life insurance companies have grown more and more complex over the past few years as new deals and structures are offered in the asset market. While simpler assets like noncallable and callable bonds can be easily incorporated into cash-flow testing models, the newer and more intricate assets such as CMOs, mortgage-backed securities, and asset-backed securities, create modeling problems. These assets require not only that the specific tranche that the company owns be modeled, but that the entire deal be given consideration because payments to the company invariably depend on the paydown of previous tranches in the deal.

So how should you go about incorporating these complex assets in the model? The first solution is to make use of the huge asset databases that some software vendors have put together. Typically, these databases contain the deal into which you have entered or a similar deal that can act as a substitute. The databases can then provide future cash flows for your tranche for any future interest-rate scenario you desire. Of course for the small company, the issue becomes cost. The databases can be expensive to tap into when the information is bought on a fixed-cost basis, especially given that the company may only hold a handful of cusips (investment identifiers). Variable "per cusip" pricing is sometimes available as a solution, but the cost may still exceed a small company's budget.

In an effort to keep up the integrity of their models without absorbing large costs, some companies are examining alternative ways of incorporating these more intricate assets into their projections. A few of those alternatives follow.

Leverage an Existing Relationship

All around a smaller company, employees are dealing with people on the outside that can provide the information needed.

- ***Fixed-Income Securities Brokers***. The person who manages your fixed-income security portfolio has many people calling every day trying to initiate trades. When a trade is actually made, the broker who assisted in the process receives a nice commission. Why not get more value for your commission dollar? Brokerages typically use large-portfolio management systems to analyze assets and to run projections themselves. They might use an asset database or have similar technology that can generate cash-flow projections under different scenarios. Most of the modeling systems being used in small companies today have ways to import this cash-flow data and use it very efficiently in projections. In addition, brokers usually like to get life company portfolios in their hands, and they probably like it better when it comes to them in electronic form. This helps them understand what securities are in your portfolios and what the overall strategy of the portfolio is. With this information, they can recommend different opportunities as they arise. This exchange is typically seen as a fair tradeoff—portfolio information to the broker for cash-flow information from the broker.
- ***Consulting Firms***. Relationships exist between consulting firms and all insurance companies, regardless of size. You may have a relationship with different consultants for pricing projects, financial-reporting overviews, and auditing statement results. As part of the relationship, you might consider whether cash-flow information could be received from the consulting firm. Consulting firms often see this process as a means of developing a stronger relationship with the company and developing goodwill for the future.

Security Quotation Systems

Many of the systems that investment departments use to trade securities offer a wealth of information. The systems typically have different screens that can give instantaneous information about the securities, as well as projections of how those securities will behave in the future. In addition, these systems are starting to provide links that enable the user to take information off the screen and export it to a desktop computer in either spreadsheet or text file format. Since your company has already spent a large amount of money and resources to purchase these systems, it makes sense to investigate how they can be used to aid in your asset modeling. The capabilities of systems differ, but some permit you to enter either a constant PSA level or a dynamic vector of PSAs into the system and then have the system generate cash flows. These cash flows could possibly be restructured into files that your modeling system can read in and use in a projection. Since some systems require PSAs instead of interest rates to be an input to the process, it might take some expertise or a talk with a broker to see how an interest rate scenario could be translated into a vector of PSAs.

"While simpler assets like noncallable and callable bonds can be easily incorporated into cash-flow testing models, the newer and more intricate assets ... create modeling problems."

Keep in mind that you should always perform a few checks whenever you receive data from another source. The first check would be to make sure that you are entitled to receive data from the source. With legal contracts and entitlement rights varying all over

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Modeling CMOs
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the map, it makes sense to get some assurance that you can proceed in your projections with data you have received. A second check would be to test the credibility of the cash-flow information. If you get data with an asset database as a source, check it against your fixed-income portfolio manager's security quotation system. Take a low-, medium-, and high-level interest rate scenario and get comfortable with the prepayment and extension of the assets. Unfortunately, some security quotation systems may use the same prepayment model that is used to generate the cash flows from the asset database. In this case, you could potentially be checking bad data against the same bad data.

When it comes to making decisions about investing in software or databases used to model assets, it often pays to determine what resources are available within the company before spending money for a complete system. With a little creativity and knowledge of the relationships within a company, you might be able to prevent spending unnecessary resources on an outside system.

Dale Hall, ASA, is with Westfield Companies in Westfield Center, Ohio.

Entering the Equity-Indexed Market through Alliances

by Jerry F. Enoch

The November 1997 issue of *small talk* contained an interesting article, "Equity-Indexed Annuities: Feasible or Flawed for Small Insurers?" by Andrew S. Chow, which thoroughly explored some of the pitfalls facing small insurers who want to issue equity-indexed annuities. One way that small insurers can face the problems of entering the equity-indexed marketplace, as well as many other ventures, is through alliances with other companies. Lafayette Life, a company with less than $1 billion in assets, has chosen to enter the equity-indexed marketplace, and an important component of its entry into the marketplace is the formation of alliances.

The equity-indexed marketplace appears to be well-suited for the formation of alliances. An alliance can address the problem of inadequate asset mass and investment expertise, and it can also address other problems that particularly plague the small company that is considering entry into the equity-indexed marketplace, such as policy drafting and filing, marketing and training materials, administration, valuation, and cash-flow testing. The simplest structure for an alliance is to have one primary company and one or more secondary companies. The primary company performs all functions for itself; the secondary companies rely on the primary company to perform some functions for them.

Synergies

By grouping together, all companies benefit by pooling premiums to reach the critical mass necessary to purchase the needed investments. This is crucial because derivatives are sold only in relatively large quantities. The primary company can actively develop the necessary investment expertise. The secondary companies can learn from the primary company, which is much easier than learning independently.

The primary company will have developed an investment policy for its own equity-indexed products. Developing and maintaining an investment policy for equity-indexed products is a substantial undertaking. That policy should be agreeable to the secondary companies and should become a part of an investment management agreement between the companies, under which the primary company will manage the investments for the equity-indexed products. The agreement can allow the secondary companies to hold their own assets.

The policy form, actuarial memorandum, and other filing materials of the primary company can serve as the basis of the policy filings of the secondary companies. In addition, the filing experience of the primary company is a great benefit to the secondary companies. Obviously, the policy characteristics must appeal to the secondary companies for the alliance to succeed. Similarly, the marketing and training materials of the primary company may be directly applicable to the secondary companies, or they may provide the basis from which the secondary companies can develop their own material.

Equity-indexed products present unique administrative challenges. In fact, the design of an equity-indexed product is often limited by the flexibility of the administrative system. The primary company will own, or have access to, an administrative system to administer the equity-indexed business. The primary company may make its system—or full administration—available to the secondary companies for a fee. A competitive advantage can be obtained by selecting a primary company with a flexible administrative system. In fact, flexibility to meet a niche may be a small company's advantage. Of course, it is important for the administrative system to work on January 1, 2000.

Valuation and cash-flow testing of equity-indexed products are major undertakings. In these areas, also, alliances offer advantages over independent operation. The primary company can easily perform valuation for the secondary companies in the same manner as it

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performs them for itself, or it can provide any desired consultation. Alliances offer several possibilities for meeting the challenge of cash-flow testing. The primary company may develop the cash-flow-testing methodology and perform cash-flow testing for the secondary companies or provide them with advice. Alternatively, the companies may jointly develop their cash-flow-testing methodology. Either approach seems preferable to working independently. Regardless of the process used, each company must be knowledgeable and comfortable with the cash-flow testing that is performed on its business. Fees could be included in the administrative agreement or could be independent.

Requirements for Success

In any alliance, certain conditions must be met for the alliance to succeed. The needs of each party must be met and the costs to each party must be less than the benefits. The companies must have similar values and should be able to operate in a relationship of trust. The primary company should be very open and communicate well. This is important to earn and maintain the trust of the secondary companies and to provide the secondary companies adequate knowledge of their equity-indexed business, for which they are ultimately responsible. The secondary companies need not have any relationship with each other.

As in virtually any enterprise, agency issues are important. In consideration of an alliance, each company will need to consider the degree to which the agents of the other companies are in competition with their own agents. Because equity-indexed products can be sold through various distribution channels, conflicts with agents can be minimized in alliances whose members use different distribution channels or concentrate in different regions of the country. Also, it may be desirable to structure administration so that the primary company does not know the agents of the secondary companies.

Availability

Despite the appeal of alliances, few companies are actively seeking these types of arrangements for equity- indexed products. Lafayette Life is actively pursuing such alliances. To date, Lafayette has entered into alliances with three other companies for equity-indexed business. We currently issue an equity-indexed, single-premium annuity and are developing an equity-indexed, flexible-premium annuity and an equity-indexed universal life policy. The company believes that alliances provide an attractive means by which small companies can profit from the interest in equity-indexed products.

Jerry F. Enoch, FSA, is Vice President and Actuary at Lafayette Life Insurance Company in Lafayette, Indiana.

Compromise on Guideline XXX in Works

Editor's Note: *This article originally appeared in the April 8, 1998 issue of* The Van Elsen Report, *a publication of Van Elsen Consulting, and is reprinted with permission.*

The National Alliance of Life Companies (NALC) hosted a meeting in Chicago on April 2 to discuss possible alternatives to the impending XXX regulation. A tentative agreement was reached by the attendees. This proposal will be presented to the Life and Health Actuarial (Technical) Task Force at its meeting in June.

Who Attended

There were 29 people present with at least six others on the speaker phone. Every possible faction of the industry was represented: mutual and stock, large and small, companies and consultants, industry representatives, and regulators. In addition, the American Council of Life Insurance (ACLI), and the NALC were represented. Bob Barney of Compulife Software also participated. Mr. Barney has been very vocal to governors and insurance commissioners about his opposition to XXX.

Basic Reserves

The new methodology (named "JVE" at the meeting) is very similar to the methodology contained in the XXX regulation. The primary difference is that a company must use its current premium scale for determining segments and premium ratios. This would generally create traditional "humpback" reserves for the period of intended level premiums. For example, a 20-year term product with premiums guaranteed for five years would have to set up 20-year "humpback" reserves.

In addition, the five-year exemption provided for in the current XXX regulation has been eliminated.

Minimum Reserves

Minimum reserves are defined similarly to the definition contained in XXX. Segments and premium factors, however, will be based on current premiums. Except for the difference in mortality tables, these net premiums are calculated the same as for the basic reserves. Premium deficiencies, if any, will be calculated based on guaranteed premiums.

Basic Mortality Table

A new set of selection factors will be developed modifying the 1980 CSO table. It is anticipated that the selection period may be 20 years, with longer periods possible at the younger issue ages. It is also anticipated that these factors will reflect the new preferred classifications of underwriting. It will also be more reflective of current mortality levels with appropriate statutory margins.

Minimum Mortality Table

A more aggressive set of mortality tables will be developed for the minimum

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reserves. It is possible that the valuation actuary will need to justify the use of the mortality table. These tables may or may not be based on the 1980 CSO table.

Planned Activities

The ACLI's Actuarial Committee will meet on May 12 to consider supporting the compromise. The NALC's Actuarial Committee will meet in April to consider supporting the compromise. In the meantime, five subcommittees have been formed to deal with technical issues of the recommendation. The full committee will meet in Washington, D.C. on May 13 to finalize the recommendation to the L&HATF. This meeting will be sponsored by the ACLI. Please contact our office if you would like to attend.

1. ***Basic mortality table.*** This group will recommend new selection factors for the 1980 CSO table. Rob Foster of CNA will be heading up this subcommittee. The report is due on April 17.
2. ***Minimum mortality table.*** This group will recommend new mortality tables for determining minimum reserves. Rob Foster of CNA will be heading up this subcommittee. The report is due on April 17.
3. ***Draft regulation.*** This group will be responsible for drafting the necessary changes to XXX to reflect the compromise. Jim Van Elsen of Van Elsen Consulting will be heading up this subcommittee. The report is due on April 20.
4. ***"Loopholes."*** This subcommittee will focus on finding problems with the proposed compromise. They will be trying to develop ways to get around the regulation so that potential loopholes may be closed. Lee Harrington of American General will be heading up this subcommittee. The report is due on April 27.
5. ***Communications.*** This committee includes actuaries representing the ACLI and NALC. It will be the group responsible for coordinating the activities of the other groups, as well as putting together the package for the ACLI and NALC Actuarial Committees. They will also be responsible for making the presentation to the regulators in Kansas City in June. Steve Smith of First Colony will be heading up this subcommittee. The initial report is due on May 5.

If all goes well, Jim Van Elsen and Steve Smith will be making a joint presentation to the L&HATF in June. If it is accepted, the suggested modifications will need to work through a normal process for NAIC adoption of a model regulation. This could be expected to be completed in 1999. The effective date of the regulation is proposed to be January 1, 2000, although there may also be a 51% language.

In addition, if well received, efforts will be made to modify, or delay, XXX where it has already been adopted. Wisconsin, for example, will be asked to move back the effective date until January 1, 2000, as well as to make the proposed changes to the regulation. It is also anticipated that New York will consider adoption of the revised model.

Gathering in Washington, D.C. to plan the activities of the Smaller Insurance Company Section for the coming year are Council members (left to right) standing—Chris DesRochers, Norm Hill, Perry Kupferman (Program Representative); seated—John Wade (1997–1998 Chairperson), Norma Christopher (1996–1997 Chairperson), and Lori Truelove.

Smaller Insurance Company Sessions at the Annual Meeting

October 18–21, 1998
New York City

50SM/L **BE ALL THAT YOU CAN BE: AS AN ACTUARY IN A SMALLER INSURANCE COMPANY**
Chairperson: John E. Wade
Lecturer: Dennis L. Stanley

The lecturer presents the expectations of top management of the evolving actuarial role in smaller life insurance companies. Topics include leadership opportunities, legislative and regulatory hurdles, marketing role, management issues, and personnel issues.

Members will enjoy having breakfast and reflecting on the growing role of the actuary in a smaller life insurance company.

Open to Section members only. Advance registered required.

102OF **TITANIC OF PRODUCT DEVELOPMENT: AVOIDING THE ICEBERG**
Moderator: Christian J. DesRochers
Panel: Norse N. Blazzard*
Kevin A. Marti

This panel briefly
- Discusses the unique problems of product development in small insurance companies
- Considers the value of turnkey products, reinsurers and other expert services
- shares insights on the ability of smaller companies to offer "luxury" products (for example, equity-indexed or variable products)
- Discusses the role of changes in technology.

Panelists explore various issues in product development through the metaphor of the ill-fated ocean cruiser and initiate audience participation through public dialogue on the topic.

119IF **A GAME OF JEOPARDY: SMALLER INSURANCE COMPANY SURVIVAL FOR $200**
Host: John E. Wade
Contestants: Keith A. Jensen*
Stephan A. Kiratsous*
Craig F. Likkel

Panelists ("contestants") present the following topics utilizing the *Jeopardy* game show format. These topics include:
- Consolidation trends—demutualization, upstream holding companies
- The characteristics of candidates for merger or acquisition
- Company positioning, niche markets
- Survival strategies: predator versus prey.

The moderator ("host") solicits active audience participation to cover each topic and determine the depth of the discussion.

PLEASE NOTE!

A late-breaking development affects the article "The New York Seven: A Discussion of State Regulation of Mortgage Investment Portfolios" by Joel Lantzman in this issue of *small talk*. On page 10, in the last paragraph of his article, Mr. Lantzman refers to developments in regulating the banking industry. Referring to the projection of cash flows with up and down 1%, 2%, and 3%, as can be generated by Bloomberg, the Federal Financial Institutions Examination Council (FFIEC) was "working toward eliminating its usage as a regulatory requirement." On April 23, it eliminated "the high-risk tests as binding constraints on mortgage-derivative products (MDP) purchases" for 1998.

This shows that bank regulators can reevaluate the need to require testing. Regulation does not automatically get more complex. Banking regulators are capable of deciding to decrease regulation if it is deemed unnecessary.