SMALLER INSURANCE COMPANY SECTION

"A KNOWLEDGE COMMUNITY FOR THE SOCIETY OF ACTUARIES"

Small Talk

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Smaller Company Actuary/Consultant Dialog on Principles-Based Reserves

By Don Walker and Terry Long

Other SOA section newsletters have recently featured dialogs between practitioners on the topic of Principles-Based Reserves (PBR). As an example, see the lead article in the May issue of *Taxing Times,* the newsletter of the Taxation Section. We thought that we would have a dialog between a smaller company actuary and a consultant who works with smaller companies. The participants are Don Walker, chief actuary at Farm Bureau Life Insurance Company of Michigan (FBL-MI), and Terry Long, a principal with Lewis and Ellis Inc. (L&E).

An important issue for smaller companies is the possibility—some would say probability—that the implementation of PBR will be costly. Smaller companies may not have the staff to routinely support the changeover and may be forced to go to outside resources to make the transition. They may also find it challenging to perform the annual work to support PBR. Finally, they may have to incur the additional expense of an outside reviewer.

Long: Don, what kind of products does FBL-MI sell?

Walker: We sell fixed annuities (FPA, SPDA and SPIA), universal life with no secondary guarantees, par whole life and term. We do not sell variable products, UL with secondary guarantees or return-of-premium term.

Long: How big is FBL-MI and what is its market?

Walker: We have roughly $1.66 billion in assets, $115 million in premium and $277 million of surplus as of year-end 2006. We are the life affiliate of the Michigan Farm Bureau Insurance companies, which market Life and property and casualty products through a multi-line field force in the state of Michigan.

Long: Isn't that a pretty big company, at least compared to what is usually thought of as a small company?

Walker: I know we sound "big," but we think "small." Our management is very cost-conscious. I always say that "small" is a state of mind, not a particular set of financials. The fact that we write exclusively in the state of Michigan also contributes to our self-image as a "small" company.

Long: Describe FBL-MI's actuarial staff, both in terms of size and experience. To what extent do you use consulting actuaries?

Walker: I've been with FBL-MI for 34 years; the first 20 in information systems, the last 14 in actuarial. I'm a career ASA; I've been FBL-MI's appointed actuary for 11 years. I have a FSA with over 25 years of experience in my pricing slot; I have a

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Editorial

By Jim Thompson

Once again the issue of the Principles-Based Approach (PBA) to reserves is the major feature of our issue. In June we led with the report of Subgroup 4 of the Valuation Law and Manual Team to the March NAIC meeting. It would be fitting to do the same for this issue but for the timing. The fall meeting of the Life and Health Actuarial Task Force (which precedes the full NAIC meeting) will begin on Sept. 28. It usually occurs close to the beginning of September. The winter meeting will begin Nov. 30, a little earlier than usual.

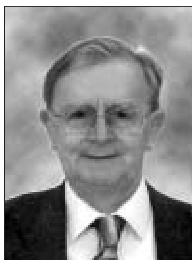
We try to cover the fall meeting in time for our readers to learn what has happened so they will be prepared for the activities for the winter meeting. The material for this issue was due the end of August. The reports to be presented to LHATF are only made public the first week in September. The best we can do is select some relevant items and include them in this issue. Thanks to the Society's editorial staff, we can assemble this issue except for this LHATF material and then add it shortly before this newsletter goes to press.

Inside This Issue

Time is of the essence, and it is important that all smaller company actuaries get involved in understanding what is being developed and the way it may affect their employers. Closer involvement will help shape the way the final proposal will come down. To emphasize the way we should all get involved in this effort, our lead article is a dialog between Terry Long, a principal of Lewis & Ellis, and Don Walker, the appointed actuary of the Farm Bureau Life of Michigan. Let us all pay attention to the final appeal in their article for others to get involved.

One aspect of valuation affecting the development of the PBA is the way the IRS will view this. Chris Des Rochers has written an article for the September 2007 issue of *Taxing Times,* the newsletter of the Society of Actuaries' Taxation Section, entitled "Tax Uncertainty Swirls Around Principles-Based Reserves." We have been graciously allowed to reprint it.

Some questions discussed are: Do PBR reserves qualify as life insurance reserves under section 816 to determine qualification as a life insurance company? What is the definition of CRVM under section 807 as it applies to principles-based reserves? What effect does the inclusion of factors other than interest and mortality have on the status of the reserves? What is the effect of company-specific mortality assumptions?



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Mark Birdsall, another member of Subgroup 4, has written an article on a recent presentation to the Commissioner of the State of Utah. We also have other articles on non-PBA subjects which should be of interest to our readers.

In addition, we have an article by Norm Hill, a consultant who is a member of Subgroup 4. ""How Can a Small Company Manage Capital and Grow?" highlights the effective use of modeling and projections. This is important to understand new business growth, the different accounting bases (GAAP and statutory) and the different types of capital and surplus (statutory, NAIC RBC and special rating agency requirements).

Jeff Norris and Adam White have written an article on managing investments for insurance companies, large and small. I hope this gives you some insights for your investment committee.

Steve Siegel, a research actuary for the Society of Actuaries, gives us an update on the Generally Recognized Expense Table (GRET) which is used for life insurance illustrations.

This is important to understand new business growth, the different accounting bases (GAAP and statutory) and the different types of capital and surplus (statutory, NAIC RBC and special rating agency requirements).

Meg Weber, SOA director, section services, has contributed an article on section metrics, criteria to measure the effectiveness of a particular section. This is helpful for our section as well as others to better understand how to serve you.

NAIC Information

After our usual deadline, the information packet for the LHATF meeting at the NAIC fall meeting became public domain. We were given an early copy. I selected two relevant items. These are survey results gathered by two Subgroups of the Valuation Law and Manual Team (VLMT). Subgroup 3, entitled "Summary of Regulator Responses to the Subgroup 3 Survey" deals with the experience reporting requirements.

The second one is from Subgroup 4. It focuses on the product list and which ones the regulators feel should be included in PBR upon the operative date. One approach to PBR is to initially include only the more risky products so that everyone involved, both regulators and valuation actuaries, has a chance to get familiar with the PBA process without being overburdened with work.

By the time this newsletter reaches you, the fall meeting will be over and you may have found out what happened with these reports. Were they simply accepted, or was there some reaction to them?

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CLU with 21 years of experience and an FLMI with two years who do reserves and pricing. Until a year ago, I had an in-house FSA for CFT; that work is now being outsourced to a consulting firm. Other than that, we have made minimal use of consultants.

Long: How sophisticated are FBL-MI's reserving and asset-liability management (ALM) practices?

Walker: Our Exhibit 5 reserves are calculated using a commercial reserving software system. We also do annual cash-flow testing using a commercial actuarial modeling system. Due to time and manpower constraints, we perform the testing using ending third quarter assets and liabilities. We segment our business in the model. All segments are run against a standard set of 16 scenarios (NY7 plus inverted, current and normalized yield curves); we supplement those results by running the interest-sensitive segments (UL and deferred annuities) against the RBC200 set. ALM studies are done infrequently; our staff is currently fully committed to migrating our products to 2001 CSO.

Long: How much have you, your staff and FBL-MI management heard about PBR?

Walker: I try my best to keep up with it. I went to the VA Symposium the last two years (and am going again this year). I get information from my contacts at other small companies, especially the national network of Farm Bureau companies, whose actuaries get together each year. Dale Hall of Country Life has been a good source; he's on one of the committees. I also count on my contacts in the consulting community, like you and Jim Thompson.

My management has their own sources (such as ACLI); they come back from those meetings shaking their heads in dismay, saying, "What are you actuaries trying to do to us? Are you all crazy?"

Long: How do you respond to them? Do you share their concerns?

Walker: Let me share a story with you. As I said, I attended the VA Symposium last year, where I went to a session that talked about PBR as it is being practiced in Canada. An actuary in the audience stood up and asked the speaker how many small insurance companies are left in Canada. The answer came back "none." The speaker went on to point out that conversion to a PBR-like system would involve an initial expense in the range of $800,000 or more.

Needless to say, this exchange made me think a lot about the potential cost and benefits of PBR. There are obvious concerns for smaller companies. Their costs—as a proportion of their size—will be larger than those of the big companies; the benefits they will gain (reserve relief?) would seem to be less, since they won't be writing the same volume of new business—subject to PBR—as larger competitors. Note that I'm not even considering (yet) the ongoing costs, such as the outside reviewer.

Long: Based on the PBR proposals you've seen, what do you think small and medium-sized companies can do to alleviate this cost issue? Are there other changes to the PBR proposals you would suggest?

Walker: I have ideas that could work at some smaller, maybe even medium-sized, companies, assuming that their managements would prefer to hold higher reserves rather than spending the extra money to do full-blown PBR. Needless to say, a company would need to have some surplus to spare and stakeholders that could tolerate the deviation.

For example, I've read—in a paper by Chris DesRochers and Doug Hertz in the May SOA *Actuarial Practice Forum*—that PBR reserves should generally be lower than CRVM reserves because of the margins in the gross premiums. Chris and Doug were talking about tax reserve issues, but I think their assumption would certainly hold for a line like par whole life. On that basis, why couldn't a company just continue to hold CRVM reserves for par whole life?

I'll give you another example. A few years back, I attended a seminar on 2001 CSO migration; the presenter said that reserves for an accumulation-type universal life product would tend to end up at the cash value floor after roughly

eight to10 years. The context was why accumulation UL reserves wouldn't get much benefit from 2001 CSO. That implies to me that, barring special product guarantees or asset issues, UL CRVM reserves based on the UL Model regulation should end up roughly the same as PBR. They will both end up at the CV floor. So, under those circumstances, why should a company spend extra money to do PBR on an accumulation UL? The reserves can't get any lower because of the cash value floor. And if they need to be higher, won't the cash flow testing that needs to be done for the A.O.M. be sufficient to identify and quantify the problem?

Almost everyone agrees with the contention that XXX term reserves are too high. If a company is willing to hold "old-style" XXX reserves for their term, however, why shouldn't they be permitted to do so?

Finally, if a company is doing a good job of cash flow testing of their interest-sensitive business, what's wrong with CARVM reserves for fixed deferred annuities?

Please note that I am not advocating simplistic approaches for lines like variable annuities with sophisticated guarantees or for ULs with significant secondary death benefit guarantees. If a smaller company wants to play in the big boys' sandbox, it should be willing, and required, to do the extra work.

Terry, let's turn this around. As a consultant who might be acting as a reviewer, what would be your reaction to my deviations from "pure" PBR?

Long: First, I agree there should be provisions to allow companies to limit the costs of a new reserving methodology, especially for products or lines of business for which that methodology will have limited benefits for the company or policyholders. However, I believe this principle should apply to all companies, not just smaller companies. For instance, you mentioned participating whole life as an example where CRVM reserves currently being held would typically be larger than the reserves under PBR. However, due to the cash value floor, there is a relatively small amount by which reserves could decrease even if a "pure" PBR reserve is calculated.

However, due to the cash value floor, there is a relatively small amount by which reserves could decrease even if a "pure" PBR reserve is calculated.

One actuary I talked to stated that if PBR allowed him to set his company's traditional life reserves equal to the cash values, total reserves would decrease no more than $3 million even if PBR was applicable to *all* existing business. This company already performs cash flow testing annually and the reserves have always been found to be sufficient. I find it difficult to believe that requiring them, or any company, to spend tens, if not hundreds, of thousands of additional dollars to possibly reduce reserves a relatively small amount is in the benefit of the company, its policyholders or the industry.

Second, I could not agree more with your statement about "playing in the big boys' sandbox." For those products and lines of business with material tail risk, company size should not allow a company to avoid PBR. There will likely need to be concessions with respect to recognition of your own experience since smaller companies will be less likely to have credible experience. But the process of determining reserves should be similar.

As far as your proposed deviations are concerned, I would be comfortable with most of them assuming they are permitted by the final PBR regulations. I have already commented on my thoughts of holding CRVM reserves for participating whole life insurance supported by asset adequacy analysis versus full-blown PBR reserves. Subject to a review of your cash flow testing, your suggestions for universal life without secondary guarantees and fixed deferred annuities appear to be reasonable alternatives to PBR. And most of us would agree holding "old style" XXX reserves would be more than adequate.

You did not specifically suggest an alternative for determining reserves for SPIAs, but I have assumed you meant to exclude them from full-blown PBR as well by holding some "safe" level of reserves. Given the nature of both the longevity and interest risks associated with this product, I am not confident there is a "safe" level of reserves similar to CRVM reserves for participating whole life or CARVM reserves for fixed deferred annuities. Unless the SPIA reserves are immaterial, I would prefer those reserves be calculated consistent with PBR principles.

Key to your entire proposal is the condition that a company has the means and willingness to hold the larger reserves. While FBL-MI might satisfy those conditions, not all smaller companies will. Even then, will FBL-MI be able to continue offering reasonably competitive products as some, if not most, of your competitors move to PBR? If not, you will eventually have to move to PBR. When that time comes, will there be alternatives that allow you to hold something less than the "safe" reserves you have described without incurring all the expense of full-blown PBR?

Walker: I tend to agree with you that competition in some lines will eventually force companies to move to PBR. I think that term is the line where this is likely to be the biggest issue. Term is also the line where current methodologies (XXX) are already forcing companies to do periodic tweaking of reserve assumptions (such as annual x-factor validation). I'm not sure that there will ever be a compelling reason to do PBR for par whole life, accumulation UL or non-bonus fixed annuities. The competition is coming from other lines, like variable and secondary guarantees, and I have doubts that small adjustments in reserves will make a difference.

I agree that SPIA will have to be addressed, but that it may well be immaterial for many companies.

I also note that I've heard talk that there are proposals out there that would allow companies to use existing CRVM approaches for product lines that do not have "significant tail risk." Some of the motivation for this has to do with the other piece of the reserve puzzle—tax reserves.

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Terry Long, FSA, MAAA, is senior vice president and principal of Lewis & Ellis, Inc. in Overland Park, Kansas. He has been a frequent speaker on smaller company issues. He can be reached at *tlong@lewisellis.com.*

Long: So, now that you've brought them up, how might a company that doesn't want to invest a lot in PBR handle tax reserves?

Walker: This could be harder to swallow for management, since no one likes paying any more tax any sooner than they have to. However, I think that some companies might find it acceptable to hold cash values as their tax reserves for certain lines. And that assumes that the Internal Revenue Service decides to accept PBR as the basis for tax reserves. There are a number of practitioners that have doubts about that happening.

Term might well be the line where a company will need to invest in PBR to deal with the tax side as well as the stat side. But, a company could still compare the cost of PBR in hard expense dollars versus the benefits in softer tax-shifting dollars and decide that the overall benefit of PBR just isn't there.

Long: What about the additional experience studies that PBR seems to demand? How will smaller companies deal with those?

Walker: With the tightening of the exemption rules for the A.O.M. already in place, it is questionable whether companies can avoid doing these studies anymore. Just to satisfy the needs of their Cash Flow Testing process alone, they will need to do more frequent studies of all kinds. I can only hope that the NAIC will recognize the burden that may be put on the smaller companies. But remember what I said about the "big boys sandbox." ●

Editor's Note: *Stay tuned as these and additional questions are debated and discussed in future issues. We welcome your opinions and input.*

How Can a Small Company Manage Capital (and Grow)?

By Norman E. Hill

During my career, I've attended and participated in several sessions about small companies. One was titled, "Are small companies going the way of the dinosaur?" Another had an implicit theme, "Can small companies survive?" There may have been yet another one: "Should small companies survive?" My basic answer to these types of questions is, "Yes, they can survive, but, in vernacular, it ain't easy."

One question is: Just what constitutes a small company? The historic FIT threshold is $500 million assets. Today, $1 billion, even $2 billion, might qualify as a "small" dividing line.

Small companies seem pretty much a U.S. phenomenon. I know there are no small companies in Canada, and I'm not aware of similar companies in other countries.

From a 2005 National Association of Insurance Commissioners (NAIC) statistical summary, there are about 700 U.S. companies out of 1,022 with under $500 million assets. The great majority of these are under $100 million. Many of the 700 are affiliated; some are stagnant. Arguably, the ones trying to grow, who are concerned with capital management, carry at least $100 million assets today.

Good Marketing Equals Growth

Marketing of products is essential to growth. However, since capital usually suffers initial adverse impact from marketing activity, the function is a two-edged sword and must be managed very carefully.

It's been stated before that a small company should seek marketing niches. "Don't try to be all things to all agents" is often advised. This means that several, but not a great many, niches should be attempted. Preferably, they should be "safe" niches. Today, lines like long-term care, stop loss, long-term disability and variable products are often considered unsafe for small companies, due to uncertain claims experience, claims volatility, start-up expenses, specialized personnel required, or a combination of the above.

Today, lines like long-term care, stop loss, long-term disability and variable products are often considered unsafe for small companies. …

Small companies have often complained that rating agencies are biased against them, and focus entirely too much on size. In any event, in dealing with rating agencies, a company should avoid the above niches that are out of favor today. At the very least, it should not be deemed overly concentrated in any one of them.

Some companies have claimed that, if they receive a lowered rating, their marketing activities would cease, and they might as well close their doors. However, some small companies can be pointed to that have been able to sell significant new business with less than, say, an A- rating from *Best.* Since selling insurance is highly psychological, a company should decide whether its desired marketing niches will tolerate a relatively low rating.

In any event, a company should measure in advance how high a rating it needs to be successful, and how much a high rating would conflict with its other desired elements of management flexibility.

Some small companies rely heavily on reinsurance. Professional reinsurers can provide surplus relief and thus protect capital, as well as underwriting and related advice. However, reinsurance should not be considered a panacea. First, reinsurance prices seem to be rising today. Due to likely small volumes ceded, some reinsurers are reluctant to deal with small companies.

If a company intends to use reinsurance for a product, it should determine in advance what amounts it would need for anticipated sales, how

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much reinsurance is available and at what cost. Because of complex product designs, in terms of rate guarantees, recapture provisions, etc., reinsurance contracts should be read very carefully.

Of course, small companies that specialize in pre-need or final expense products sell small size policies that often involve no reinsurance at all.

Modeling and Risk Management Are Key

Modeling and risk management are frequently used terms today, and they are important to small companies.

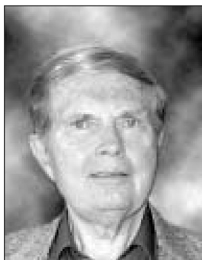
An efficient, thoroughly tested model is essential in managing a company and its capital. The model must be understood, first by management as to its output, and by competent technical personnel as to its minute working details.

Some particular requirements for a model include:

1. Flexibility, so that varieties of assumptions and products can be included and used, and output can be provided with different formats and sorts.
2. The model should cover the entire company, but separate in force by desired product lines. These lines themselves must have flexible definitions, such as life, annuities, health, fixed versus variable and various products within all the former.
3. New production by product lines must be separable from projections of current in force.
4. Various scenarios of sales volumes must be calculable.
5. Consistent with number one, the model must be capable of running "as if" scenarios.
6. Investment income on capital must be included, often as a separate corporate line, but possibly by allocation to product lines.
7. All expenses must be included, with some possibly in the corporate line.
8. Different accounting bases must be calculable, such as statutory, U.S.GAAP and possibly, GAAP in other jurisdictions.
9. When projecting statutory capital and surplus, the model should also run risk-based capital, the minimum required statutory capital based on NAIC definitions. Possibly, required capital from rating agency definitions (Best "B-CAR") should also be run or estimated. Risk-based capital may be run in total, or, depending on company allocation practices, shown for product lines.
10. The model should definitely project earnings and capital. Possibly, it should also project balance sheets, either in total, or by product line.
11. Some models may also project the runoff of current invested assets, either in total, or separate by product lines. These may be useful for some statutory reporting, such as the frequently used "New York 7" scenarios. Here, assumptions of interest rates, equity returns, defaults, calls, etc. should be included in the projection of investment income and maturities. It should be remembered that, for many long term lines, the performance of reinvested assets is often equally important to long term profitability.
12. If federal income tax is included in model projections, it may be calculated separately by product line, or one overall tax rate may be used.
13. For small companies, lack of critical mass is often a serious problem. Even with reasonable efficiency, current unit expenses may be well in excess of pricing expenses. However, anticipated growth from new sales should increase total in force so as to absorb these expenses.

    In projecting company operations, a key point is when, through these new sales, a company can reasonably expect to reach critical mass. In other words, in what year should the company's unit expenses reduce down to pricing unit expenses? In still other words, when will total expenses by absorbed?

A company's model can be homegrown or one of several well-regarded standard models on the market. Depending on each company's needs, standard models often need substantial modifications to be suitable for operations.



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Current and contemplated model requirements will need very significant computer run times. A model system must be compatible with production line and administrative systems, such as master record updates, claims summaries and regular valuation runs. This coordination is necessary for an efficient operation.

Projections from the model should be communicated in detail to top management. Various alternative scenarios should also be communicated. Illustrative labels could include, "results if sales increase 10 percent over budget" or "results if expenses increase 20 percent over budget." Depending on the expertise or inclinations of management, labels can also include "alternative results with an x percent chance of occurrence." However, in the latter case, especially with laymen management, care needs to be taken that they understand thoroughly what this x percent chance means.

As a result of all the previously mentioned steps, if a small company's model includes all the above specifications, the insurer has a successful economic capital model.

Obviously, there are many difficulties and roadblocks faced by a small company in managing its capital. What are some steps it can take?

A model system must be compatible with production line and administrative systems, such as master record updates, claims summaries and regular valuation runs.

1. Use its flexibility in reacting fast, both for making decisions and reacting to unexpected events. A small company should not have the layers of management and bureaucracy that often hamper operations of larger competitors.
2. Make sure that all members of management, both top and middle, and often many other employees, understand its plans of operations and its intended, projected results.
3. Be active in both trade and professional organizations. Lobby to impact official policies of these organizations. If a small company feels that its views and needs are not adequately represented, it may have to lobby on its own.
4. Stay active in the NAIC, where many proposals that affect its operations and very viability are presented.
5. Keep up with current trends and proposals. Today, of course, Principles-Based Reserves and associated changes for Risk-Based Capital are hot topics, involving many complex elements.

Attendance of company personnel at trade and professional conventions, as well as NAIC meetings, involves considerable expense and out-of-pocket management time. Sometimes, hiring consultants to represent, report, and also lobby for the company can be more cost-effective alternatives.

In summary, a small company can manage its capital and still have the ability to grow, if it plans thoroughly in all the above areas, and implements and monitors its plans accordingly.

Tax Uncertainty Swirls Around Principles-Based Reserves

By Christian DesRochers

I. Introduction

The treatment of life insurance reserves has always been a significant element in the federal income taxation of life insurance companies. Insurance companies in general and life insurance companies in particular present challenges in the measurement of taxable income. Historically, the tax laws applying to life insurance found in Subchapter L have been among the most complex in the Internal Revenue Code (the "Code"). As life insurers face the same tax rates as other corporate taxpayers, the unique features of life insurance company taxation involve the definition of taxable income.

As work continues on principles-based life insurance reserve requirements (PBR), the federal income tax issues that would result from state adoption of a PBR methodology continue to be unresolved. A key challenge in the transition to a PBR methodology is to determine whether such an approach can coexist with the current structure of the Code as it relates to the deductibility of life insurance reserves. The very elements that make PBR appealing, including the reliance on actuarial judgment and the use of more sophisticated financial modeling tools, create challenges in a tax valuation system. While some discussions have occurred between the industry and the Treasury, it is unlikely that definitive guidance will be forthcoming until the regulators finalize the proposed PBR methodology. However, while the resolution remains unclear, recent discussions and papers published in *Taxing Times* and the *Actuarial Practice Forum,* the on-line journal of the Society of Actuaries, have identified several issues related to the tax treatment of PBR.[1]

In the May 2007 issue of the *Actuarial Practice Forum,* Doug Hertz and I co-authored an in-depth analysis of the background and implications of principles-based reserves on the taxation of life insurance companies entitled "Treading into the Thicket: Federal Income Tax Implications of Principles-Based Reserves." Based on the analysis presented in that paper, this article considers three issues from the viewpoint of tax policy:

1. How are the amounts of the life insurance reserve deduction determined?
2. What is the effect of the life insurance reserve system on the measurement of taxable income?
3. What questions are raised by the transition to a PBR reserve system as it relates to federal income tax issues?

II. The Deduction of Life Insurance Reserves

Although the tax rules applicable to life insurance companies have gone through significant changes over the years, it has been a fundamental concept that a life insurer should not be taxed on income that is set aside to meet future contingent benefit liabilities. The ability of life insurance companies to reflect reserves in determining taxable income is perhaps the defining feature of life insurance company taxation. Under the 1984 Tax Act, life insurance companies are permitted to deduct the increase in a "federally prescribed reserve" (FPR), enabling the insurer to offset premium income by some measure of their expected future benefits. Under current law, section 807(c)(1) allows a deduction for life insurance reserves as defined in section 816(b)(1), in amounts described in section 807(d). Section 816 defines life insurance reserves as amounts "which are set aside to mature or liquidate … future unaccrued claims. …" If more than 50 percent of its total reserves qualify as life insurance reserves under section 816(b), then the insurance company is a life insurance company.

Since the inception of the income tax, the reserves recognized for tax purposes have been based on statutory reserves, as accounting methods for state regulatory purposes generally apply to insurance company taxation to the extent they are not inconsistent with federal accounting rules. However, state valuation laws have as their purpose the protection of the solvency of the in-

1 These include "The Federal Income Tax Consequences of Adopting a Principles-Based Life Insurance Reserve System," Joseph F. McKeever, III, John T. Adney and Lori A. Robbins, *Taxing Times,* May 2006; "Treatment of Taxes in Principles-Based Reserves," Edward L. Robbins, *Actuarial Practice Forum,* October 2006; "Actuary/Attorney Dialogue on Selected Tax Issues in Principles-Based Reserves Subject to CRVM," Peter Winslow and Edward Robbins, *Taxing Times,* February 2007; and "Actuary/Attorney Dialogue on Selected Tax Issues in Principles-Based Reserves (Part II)," Peter Winslow and Christian DesRochers, *Taxing Times,* May 2007.

surance company and are primarily focused on the balance sheet, not period-by-period income. The operation of the statutory reserve system is neither intended nor designed to reflect accurately the economic income flowing through a life insurance company. Therefore, not every item allowed or required by state authorities as a reserve is necessarily deductible.

Under the Code, the deduction of reserves is generally limited to insurance companies. That is, one of the consequences of the accrual method of accounting is that taxpayers generally are not entitled to currently deduct amounts set aside to cover anticipated future expenses. For non-insurance company taxpayers, the Supreme Court has noted that a "reserve based on the proposition that a particular set of events is likely to occur in the future may be an appropriate conservative accounting measure, but does not warrant a tax deduction."[2] In fact, reserve accounting is generally inconsistent with the goal of the tax system, which is the generation of tax.

The tax rules applied to life insurance reserves have been a constant source of tension between taxpayers, who seek to maximize reserve deductions, and the tax authorities, who are concerned with generating tax revenues. Much of the litigation that has arisen over the years with respect to life insurance reserves deals with the definition of what items can be considered as deductible reserves, given that the general rule in the Code is to disallow reserve deductions. Ultimately, the definition was codified and is now found in section 816. What emerged was a definition that focused on the "scientific" actuarial present value of amounts "reserved" from premiums for the payment of future benefits.

Congressional tax writers and others have long recognized that the problem in determining an equitable tax base for life insurance companies was related to reserve deductions. Tax authorities came to see deductions for state law–based additions to reserves as exceeding the amounts economically necessary to cover expected future liabilities, resulting in a distortion of income and a significant deferral of tax. The congressional intent to allow a deduction for no more than "economic" reserves first manifested itself in the 1984 enactment of section 807(d), which sets forth specific rules for computing the deductible amount of life insurance reserves.

It is clear that it is in the interest of the Treasury for life insurance companies to be taxed under the life insurance company provisions of Subchapter L. Thus, some accommodation must be reached so that the introduction of PBR does not cause life insurers to lose their qualification as life insurance companies under section 816. At the same time, almost 100 years of precedent would seem to weigh against the full deduction of a comprehensive principles-based reserve, which includes not only specific assumption margins, but also reserves for future expenses and non-guaranteed benefits. How that conflict is resolved will be critical to the federal income tax treatment of PBR.

III. Reserves and the Measurement of Taxable Income

An insurance reserve system has two functions, which often conflict. The first is to ensure that sufficient funds are set aside so that the insurance company can meet its obligations to its policyholders. The second is to control the emergence of profit, and thereby the growth of surplus. The objectives and operation of a reserve system will change depending on the relative importance of the two functions. For example, a solvency-based system may be better served when valuation assumptions are changed to reflect current conditions, whereas an earnings-based system generally looks to more stable valuation assumptions. Reserve systems are a function of the accounting system on which they are based. The actual cash flows from a block of life insurance policies are independent of the policy reserve. Therefore, the basis of valuation does not directly affect the value of the surplus that will ultimately accrue, but merely the incidence of the emergence of surplus. In general, a reserve system is at its heart an accounting device that adjusts the flow of accounting income; that is, in general terms, the policy reserve system can be considered a timing mechanism, which determines the emergence of reported earnings on the books of a life insurer.[3]

Under the current PBR proposal, the minimum reserve as of the valuation date equals "The Stochastic Reserve but not less than the Deterministic Reserve, where the Reported Reserve is calculated as the Deterministic Reserve plus the excess, if any, of the Stochastic Reserve over the Deterministic Reserve." The Deterministic Reserve is a seriatim (policy-by-policy) reserve using a single scenario and a set of Prudent Best Estimate assumptions, which is no less than the policy cash surrender value (or zero, for a non-cash value product). The Stochastic Reserve equals the amount determined by applying a prescribed contingent tail expectation (CTE) level to a range of Scenario Reserves over a broad range of stochastically generated scenarios and Prudent Best Estimate assump-

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2 United States v. General Dynamics, 481 U.S. 239, 246 (1987).

3 When the reserve calculation involves net premiums of uniform amounts and is based on the mortality and interest assumptions used in computing the net premium, the resulting reserve is known as a net level premium reserve. One characteristic of a net premium valuation is that the retrospective reserve is at all times equal to the prospective reserve. See CHESTER W. JORDAN, JR., SOCIETY OF ACTUARIES' TEXTBOOK ON LIFE CONTINGENCIES, 101 (2nd Ed. 1967).

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tions for all assumptions not stochastically modeled. Scenario Reserves are the reserves for all policies on an aggregated basis for a given scenario.

The proposed PBR methodology is not a net premium valuation method, but instead is a gross premium reserve (GPR), equal to the present value of future benefits (including non-guaranteed benefits) and expenses (excluding federal income tax) less the present value of future gross premiums. Under a gross premium approach, reserve assumptions are determined for all material risks, including not only mortality and interest, but also expense, lapse and premium payment pattern. Both the stochastic reserve and deterministic reserve calculations require the use of cash flow models, which project the premiums, benefits, expenses and other applicable items to be used in the reserve calculations. In addition, the model is to reflect the impact of all material product features, including both the guaranteed and nonguaranteed elements of the policies.

As a result, the emergence of profit under the proposed system is fundamentally different from that under a net level reserve system. A key characteristic of the GPR system is that the present value of future profits is recognized at issue.[4] That is, the initial valuation of a block of policies "capitalizes" the difference between the pricing assumptions and the valuation assumptions, while subsequent valuations capitalize the difference in valuation assumptions: that is, the system effectively "fronts" the present value of gains and losses.

Any tax system is effectively defined by the various accounting rules that are used to determine the various elements of taxable income. For life insurance companies, the reserve deduction is a key element in computing taxable income. Were PBR to be used as the basis for tax reserves, a key question is whether the pattern of income that emerges is appropriate to determining year-by-year taxable income. Determining the answer may well require significant modeling not only of the effect of the change in reserves, but also the income effects, including both the initial and subsequent valuations.

IV. Transition to a PBR System

There are several questions for which guidance is needed to clarify the tax issues created by a transition to a PBR system for statutory reserves. While these are discussed in more detail in the paper Doug Hertz and I authored, a summary of the issues follows. Answers to these questions are needed so that taxpayers will have some indication of how principles-based reserves interact with current tax law.

Do PBR reserves qualify as life insurance reserves under section 816 to determine qualification as a life insurance company?

The answer isn't clear. It could be argued that PBR satisfy at least some (or all) of the section 816 criteria. They would be held with respect to the required types of contracts, and they would be required by law. They are based on interest and mortality. On the other hand, given the inclusion of expenses and non-guaranteed benefits, the history of the development of the technical definition of life insurance reserves, and the Service's rulings position with respect to gross premium reserves, the Treasury may find it difficult to simply accept that either the deterministic or the stochastic elements of the PBR will qualify in their entirety as life insurance reserves under section 816.

What is the definition of CRVM under section 807 as it applies to principles-based reserves?

In reality, it may not matter. For life insurance contracts, the tax reserve method is "CRVM in the case of contracts covered by CRVM." For other contracts, the method is "the reserve method prescribed by the National Association of Insurance Commissioners [NAIC] which covers such contract (as of the date of issuance)." Thus, it may be the prescription of the method by the NAIC and not the label applied that may be relevant. In practice, characterization of PBR as other than CRVM may make it easier for Treasury to accept all or some of the elements of PBR to be treated as FPR under section 807(d).

What effect does the inclusion of factors other than interest and mortality have on the status of the reserves? What is the effect of the introduction of nonguaranteed elements and expenses?

One view is that tax reserves are fully defined by the federally prescribed reserve in section 807(d). Another view is that courts have generally permitted factors other than interest and mortality to be recognized in the calculation of life insurance reserves, but have tempered that view by adding: "We do not believe that Congress intended to permit an insurance company to exclude any amount it saw fit from its taxable income by creating reserves."[5] Thus, some factors, including lapse rates, may be permissible in the calculation of tax reserves, but this is likely to be tempered by the admonition concerning the reasonableness of the assumptions. The use of additional factors in the calculation

4 For example, an embedded value calculation, which has many elements in common with a gross premium valuation, is intended to show the present value of all amounts that will be distributable to shareholders based on best-estimate assumptions. The present value of gains or losses from the sale of a block of policies will be recognized in the year in which the policies are sold.

5 Union Mutual Life Insurance Company v. United States of America, 570 F.2d 382, 397 (1978).

of tax reserves may also result in differences in reserve deduction among taxpayers, depending on the assumptions. At a minimum, guidance is needed from Treasury as to what additional factors may be considered and what limitations may be placed on the factors, in establishing tax reserves.

What is the effect of company-specific mortality assumptions?

Under the PBR Model Regulation, company-specific mortality is used in reserves to the extent that it is credible. On its face, this approach is inconsistent with the current view of the Internal Revenue Service, as it has been expressed in Technical Advice, which interprets the statute as only permitting adjustments to the prevailing table for "risks not otherwise taken into account." Further, the development of multiple mortality tables may cause the Treasury to require the use of the table that produces the lowest possible reserve, even though that table may not be used in statutory reserving.

What is the prevailing state assumed rate?

In determining the federally prescribed reserve for a life insurance contract, section 807(d)(4) mandates an interest rate, determined at the time the contract is issued, equal to the greater of (1) the AFIR or (2) the "prevailing State assumed interest rate" (PSR). The AFIR is published annually by the IRS, computed as a five-year average of the federal mid-term rates. The PSR is the "highest assumed (valuation) interest rate permitted to be used in computing reserves for the contract under the insurance laws of at least twenty-six states at the time the contract is issued." The use of discount rates based in projected asset returns and projected interest scenarios may be difficult to reconcile with the AFIR/PSR statutory regime.

Are the stochastic reserves likely to be considered nondeductible "solvency" or contingency reserves?

Historically, deductions have been allowed for "technical actuarial reserves" and not "solvency reserves." Not every reserve required or allowed by state regulatory authorities is deductible. Stochastic reserves are computed by

Further, the development of multiple mortality tables may cause the Treasury to require the use of the table that produces the lowest possible reserve. ...

simulating possible future economic scenarios, each of which provides a different yield curve of future interest rates. This creates two issues: (1) tax reserves are based on an assumed interest rate not a distribution of rates; and (2) values based on a CTE methodology capture the "tail" of the distribution, not the expected value. Moreover, uniformity by company has been a long-term goal of the various methods of reserve taxation.[6] The description of the stochastic element of the reserve might lead some to conclude that it was a contingency reserve or "solvency reserve," but not a life insurance reserve.

What are the implications of including margins in the valuation assumptions?

From a tax perspective, margins are problematic in two respects. First, as previously noted, the "best-estimate" assumptions represent the expected value of policy benefits and expenses, while the effect of the margins is to create a "contingency reserve," which has historically not been deductible. Second, under the gross premium valuation method, the effect of the margins is to create an immediate deduction (at issue) for the difference between the "best-estimate" reserves and the reserves with margins included.

How will reserve increases and decreases that result from changes in assumptions be treated?

Section 807(f) addresses the treatment if there is a change in basis of computing reserves. In general, the total effect of the basis change (i.e., the reserve increase or decrease) is spread over 10 years, based on the difference in the reserves between the reserves on the old basis, and those on the new basis, determined at the end of the current tax year. The effect of the dynamic valuation aspects of PBR on the "10-year spread" will need to be clarified, or life insurance companies may find themselves in a constant 10-year spread position. Some people have argued that if reserves are computed using dynamic assumptions, then a change in assumptions does not require a 10-year spread. The implication of that argument is any strengthening or weakening of reserves resulting from a change in assumptions would flow into income in the year the change occurs.

V. Conclusion

As the discussions of principles-based reserves continue, two fundamental questions may to a large degree determine the tax treatment.

First, what makes sense from a tax policy viewpoint? Second, what can be reconciled with the technical requirements of sections 807 and 816 of the Code? Under the 1984 Act, tax reserves are based on statutory reserves adjusted to meet the requirements of section 807. Before life insurance companies can determine their tax reserves under a PBR system, they must know what adjustments are needed from statutory to tax. When and how the Treasury chooses to answer these questions will be critical to the determination of deductible reserves under a PBR system. ●

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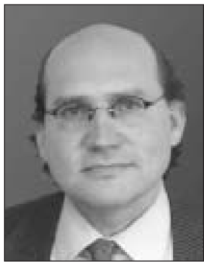
6 For example, an embedded value calculation, which has many elements in common with a gross premium valuation, is intended to show the present value of all amounts that will be distributable to shareholders based on best-estimate assumptions. The present value of gains or losses from the sale of a block of policies will be recognized in the year in which the policies are sold.

2005 Inter-Company Expense Study of U.S. Individual Life Insurance and Annuities

By Steven Siegel



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The SOA's Committee on Life Insurance Company Expenses (CLICE) has recently completed its fifth inter-company study of expenses for individual life and annuity business issued in the United States. The full report is now available on the SOA's Web site with highlights presented in this article.

The data requested was identical to that requested for the 2004 study. For this study, the total number of contributors providing data increased to 32 from the previous study's total of 28. As in previous years, a number of new contributors participated this year, while some previous contributors were unable to contribute. As in any experience study, CLICE would like to increase the number of contributors for the 2006 study as well as future ones. If your company has not previously participated in the study, CLICE would encourage you to consider and welcome you! You can find out more on how to participate in the 2006 study. Visit *http://www.soa.org/research/individual-life/pd-2006-clice-expense-study-data-request.aspx.*

For the 2005 study, contributing companies were asked to provide expense data for the following product categories:

- Life insurance—term, permanent (non-variable),* variable, COLI and BOLI. Contributors were further asked to provide acquisition expense data broken down by the following distribution channels: career, brokerage, PPGA, multi-line, direct response, other and unallocated (those expenses that were not split by channel).
- Annuities—immediate (non-variable), deferred (non-variable), variable immediate and variable deferred. The following distribution channel detail was requested: career, brokerage, PPGA, stockbroker, financial institutions, other and unallocated.

The data received from the companies were aggregated and unit cost calculations were developed. As part of the aggregation process, a series of data integrity checks was performed and company representatives were contacted to resolve missing or anomalous data.

Overall, the data submitted to the study continues to improve in reliability and data integrity. This is due, in part, to the number of repeating contributors familiar with the data submission form and the scope of data requested.

In the study, a unit cost called Per Policy Index is used to facilitate the comparison of first year expenses (excluding commissions and premium taxes) among contributors. Similarly, a Per Policy *In force* unit cost is used to compare operating expenses (excluding commissions, termination expenses, premium taxes, and for annuities, annuity payout expenses). These two unit costs provide the reader with a high level basis for making comparisons. The following table compares these unit costs for 2004 and 2005 for companies that contributed to both studies.

Comparison of 2004 and 2005 Per Policy Index Unit Costs for Companies Contributing to both 2004 and 2005 Studies

			First Year*			In Force#		
Products		Year	25% Percentile	Weighted Average	75% Percentile	25% Percentile	Weighted Average	75% Percentile
Life	Term	2004	$396	$661	$891	$44	$66	$102
		2005	444	634	868	44	59	91
	Permanent	2004	390	1,464	1,543	47	54	109
		2005	351	1,243	2,059	50	54	93
	Variable	2004	1,669	3,143	3,885	161	195	519
		2005	674	2,565	5,607	142	102	411
Annuities	Fixed Deferred	2004	$361	$751	$687	$59	$117	$149
		2005	345	950	863	62	123	149
	Fixed Immediate	2004	286	926	1,765	58	163	123
		2005	245	2,862	1,486	66	191	182
	Variable Deferred	2004	422	1,863	1,568	139	275	341
		2005	447	2,370	1,983	134	268	307

*Excludes commissions and premium taxes
#Excludes commissions, premium taxes, termination expenses and contract expenses during payout period

Please note that due to variations in expense allocations used by the contributing companies, the variety of companies that contributed and the limited number of contributors in certain categories, the results should be viewed with caution, particularly the comparison of this study with the corresponding 2004 figures.

The exhibits in the report present unit expense calculations for the various product and distribution channels for which sufficient data was available, including the weighted average by company, median, unweighted average by company and 25th and 75th percentile unit expenses where there was a sufficient number of contributors. Summarized results for all unit costs are illustrated below:

Acquisition Expense for Individual Life Insurance
Weighted Averages

					Commissions (% of premium)		
Product Type	Number of Companies	Per Policy Issued	Per $1,000 Face Amount Issued	Percent of First Year Premium	First Year	Single Premium*	Renewal
Term	27	$169	$0.48	43.0%	62.9%	N/A	3.1%
Permanent	29	147	1.08	48.3	69.9	4.5%	3.5
Variable	13	255	0.58	52.9	61.0	1.6	3.3
Total	29	162	0.62	47.4	66.9	4.1	3.4

* Includes dumps/pour-ins and dividends applied

Non-Acquisition Expense for Individual Life Insurance

Product Type	Number of Companies	Per Policy Inforce	Per Claim	Premium Tax
Term	27	$58	$229	1.8%
Permanent	29	51	71	1.3
Variable	13	102	98	1.9
Total	29	56	80	1.5

Acquisition Expense for Individual Annuities

				Commissions (% of premium)	
Product Type	Number of Companies	Per Policy Issued	Percent of First Year/Single Premium	First Year / Single	Renewal Commission
Deferred – Fixed	26	$177	1.5%	7.2%	4.9%
Deferred – Variable	13	205	2.8	5.8	3.2
Immediate – Fixed	17	241	2.9	2.8	N/A
Total	26	193	2.4	6.2	3.7

Non-Acquisition Expense for Individual Annuities

Product Type	Number of Companies	Per Policy Inforce	Per Termination	Per Contract	Premium Tax
Deferred – Fixed	26	$111	$40	$27	0.1%
Deferred – Variable	13	241	12	42	0.1
Immediate – Fixed	17	163	18	3	0.2
Total	24	154	37	10	0.1

The committee expresses its appreciation to all of the contributing companies for their assistance and support of this study. ●

**For the 2006 study, contributors have been requested to also provide universal life information separately, if possible.*

Getting the Investment Benchmark Right, Guidelines for Insurance Companies

By Jeffrey B. Norris and Adam A. White

Those familiar with the challenges of managing the liabilities associated with a pension plan know that long accepted practices are now undergoing a significant change. Historically the investment benchmarks set for these plans mirrored broad, easily recognizable indices: the Standard & Poor's (S&P) 500 for equities, the Lehman Brothers Aggregate Band Index for bonds, etc. What some in the industry have discovered is that these broad, "catch-all" indices may not be appropriate for all plans. A pension plan, after all, is in essence a set of unique liabilities requiring a unique asset benchmark. The same can be said for any insurance company.

Insurance company liabilities are unique and so, too, should be their asset benchmarks. Fortunately, there are a host of public indices available on the asset side which, along with a variety of analytical tools, can be utilized to create a custom solution.

Getting Started

Getting the investment benchmark right first requires a self-assessment by the insurance company as to their risk tolerance. This assessment drives the decision regarding the percentage allocation between fixed investments and equity. The insurer's capital position is a central consideration here. Obviously, all other things being equal, more capital would allow a greater allocation to equity with an expectation of the higher returns afforded over time by this asset class. Of course, higher volatility of returns is a by-product, and the insurer must consider this in connection with its liability requirements. For purposes of this discussion, our focus is exclusively on the allocation to fixed investments since this represents the overwhelming investment for insurers.

The next consideration in establishing an investment benchmark is the desired quality of the investment portfolio. Establishing an overall quality objective—based on Moody's or S&P bond ratings criteria—helps to define more granular decisions. For example, the need or desire on the part of an insurer to run a AA-quality portfolio may lead to less tolerance for high-yield corporate bonds or lower-rated structured securities. The quality of the portfolio is a major determinant of the insurer's financial strength or claims-paying rating, which ultimately affects its ability to sell its products. There may be differences here between companies depending upon the nature of the products sold and whether the company is primarily targeting retail or institutional markets.

Next, the insurer will work with their asset manager to determine which sectors of the bond market are appropriate. For example, will the nature of their liabilities allow them to take on option risk, as found in mortgage-backed securities? How important is liquidity? Less liquid securities such as private placements may not be appropriate if the nature of the company's liabilities dictates the need for greater liquidity. What are the regulatory constraints? States often prohibit or limit investment in specific classes of securities.

A final consideration is duration. The duration of the insurer's liabilities provides a good starting point for discussion of the portfolio duration. Simply matching the asset and liability durations is not sufficient. Portfolios of securities with vastly different individual durations can be structured to yield similar durations, but may not defease the liabilities. This can be easily understood by comparing a portfolio comprised exclusively of bonds of a single duration with a portfolio of bonds with both shorter and longer durations. Both may have the same duration, but the asset cash flows are very different. One portfolio may satisfy the liability cash flow requirements of the insurer while the other may not, even if they have the same duration.

Customizing a Benchmark

Having examined at a high level the considerations for developing an asset benchmark, we can now demonstrate how this may work in practice. Consider the case of hypothetical Truth and Justice Life Insurance Company (TJL). TJL is domiciled in New York State and

has assets of $2 billion and a mix of business, which includes life and annuities.

TJL's Investment Committee permits investment in U.S. Government securities including treasuries and agency securities, corporate bonds (investment-grade and high-yield), mortgage-backed and commercial mortgage-backed securities and asset-backed securities. Prohibited investments included direct investments in commercial mortgages, private equity funds and hedge funds. Derivatives are permitted for hedging purposes. The committee mandates an investment portfolio with an overall quality rating of A1 and a duration of +/- 1/2 year. Actuaries at TJL have developed the following profile of the company's liabilities:

Product Target	Life	Annuity	Deferred Annuity	Total
Duration (yrs)	7.00	7.50	4.50	6.15
Yield (%)	5.75	6.15	5.70	5.85
Quality	Aa2	A2	Aa3	A1
% of Business	30	30	40	100

In developing this summary information, actuaries have taken into consideration relevant data such as product cash flows, capital constraints, risk tolerance and investment income requirements.

This information was presented to TJL's third party investment manager, Top Return Investment Management (TRIM). TRIM's analysts then set about designing benchmarks for the individual product lines at TJL. They wanted to use publicly available indices for ease of modeling and because of the ready access to historical information. Because no one benchmark alone captured the desired quality, duration and asset mix required, TRIM utilized several indices appropriately weighted and developed customized composites by product. Results follow.

Product Benchmark*	Leh Agg.	Int. Credit	Long Credit	High-Yield	CMBS	ABS	Total
Life	65%		35%				100%
Annuity		40%	50%	10%			100%
Deferred Annuity		80%			10%	10%	100%

*Index Descriptions: Lehman Brothers Aggregate Index, Lehman Brothers Intermediate Credit Index, Lehman Brothers Long Credit Index, Lehman Brothers High Yield, Lehman Brothers CMBS Master, Lehman Brothers ABS Master

The final step in the process involves translating the benchmark allocations across products into overall statistical targets by which TRIM will manage the portfolio. Weighting the findings above by the percentage of business represented by each product, TRIM developed the following:

Product Benchmark*	Leh Agg.	Int. Credit	Long Credit	High-Yield	CMBS	ABS	Total
Duration (yrs)	4.69	4.24	11.40	4.36	4.97	2.85	6.13
Yield (%)	5.58	5.66	6.29	7.49	5.72	5.63	5.86
Quality	Aa1	A1	A2	B1	Aaa	Aaa	A1
Target	20%	44%	26%	3%	4%	4%	100%

* Data is as of June 4, 2007. Source: Lehman Brothers Global Family of Indices. Copyright 2007. Used with permission.

TJL's customized composite investment is now defined as these specific weightings of different representative indices, rolling up to aggregate portfolio metrics: A1 portfolio quality with a duration of 6.13 years and a yield of 5.86 percent. Working with TRIM, TJL can use this information to monitor and attribute investment results and model possible portfolio changes. This process has built-in flexibility should TJL decide to make changes in their risk tolerance or asset allocation, or if their business mix changes. TRIM, in turn, is able to manage the portfolio in confidence, knowing that they have full alignment with TJL. ●

This information reflects the viewpoint of Dwight Asset Management Company as of August 2007 and is subject to change. This article was prepared for general informational purposes only, without respect to the investment objectives, financial profile or risk tolerance of any specific person or entity who may receive it. Investors should seek financial advice regarding the appropriateness of investing in any investment strategy or security discussed or recommended in this article and should understand that statements regarding future performance may not be realized. Investors should note that income, if any, from any investment strategy or security may fluctuate and that underlying principal values may rise or fall. Past performance is not necessarily a guide to future performance.

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Notes on the Status of the Principles-Based Approach, Including Utah Meetings with Academy Representatives

By Mark Birdsall

On Aug. 23, 2007, David Sandberg, American Academy of Actuaries (AAA) vice president for life insurance issues, and Craig Hanna, AAA director of public policy, visited Salt Lake City and held two meetings to discuss issues related to the Principles-Based Approach (PBA) for both reserves and risk-based capital (RBC). In the morning they met with a group of company actuaries based in Utah; in the afternoon they talked with Utah Commissioner D. Kent Michie, several members of his staff and representatives from several companies domiciled in Utah. The purpose of this article is to share some of the author's notes and impressions from these two meetings, as well as other information provided in preparation for these gatherings.

Prior to the meetings, the author sent e-mails to several members of Subgroup 4 of the Valuation Manual Team, asking for their perspectives on the current status of PBA. This subgroup, chaired by Pam Hutchins of Government Personnel Mutual Life, has been working with the AAA's Life Reserve Working Group (LRWG) to recommend certain changes in PBA that would accommodate the needs of companies valuing smaller blocks of business or blocks of business with less risk. The goal of this subgroup is that the final regulation should contain practical guidelines so that resources for extensive PBA work are spent on the products with the most risk and that simplified processes are used where reasonable for products with less risk. An extensive PBA calculation process for a product—where the reserve results are likely to have little variability across a wide range of economic scenarios—is a waste of resources and should be discouraged.

The responses I received identified issues that are currently being addressed by the subgroup, including the following:

1. Phase-in of PBA over time, beginning with the products containing the most risk. A survey of regulators has indicated solid support for this proposal.
2. Complete company exemptions from PBA for smaller companies. Except for single-state companies that the commissioner would be authorized to exempt, this proposal has met with resistance.
3. Limited product exemptions, such as for credit life and disability, final expense insurance and traditional whole life. This proposal has met with some support, based on the lower risks associated with these products.
4. Development of a test for Material Tail Risk (MTR) which, if passed, would provide a safe harbor exemption for certain products such that no stochastic testing would be required. This proposal has met with good support from LRWG. The modeling work to develop the test is being done by the Modeling subgroup of the LRWG, chaired by Steve Strommen. Initial results appear to be promising.
5. Relief regarding expense allocations for smaller blocks of business, including newer lines of business. A proposal to use the Generally Recognized Expense Table (GRET) has met with opposition. Similar opposition was voiced to a proposal to use an exit value expense, but progress has been made in finding an acceptable basis of expense allocation.
6. Mortality margins for companies with immaterial experience. This has been a controversial issue. Some have proposed that larger margins should be required for blocks of business with less experience and the current version of the LRWG proposal includes this provision. (This may also include larger margins for other assumptions, such as lapses and expenses.) Concerns include the uneven playing field for pricing created by requiring higher reserves and RBC on smaller blocks, as well as the possibility

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that requiring higher reserves for smaller blocks creates "currency" for larger companies to use in making acquisitions (some of the funds used for the acquisition would in effect come from the release of the higher reserves of the smaller company). Simplification of the process for setting the mortality assumption has also been discussed.

7. Projecting Non-Guaranteed Elements (NGE) such as dividends and cost of insurance rates. Some companies are concerned about legal issues and would prefer to project only guarantees.
8. The requirement to model all in force business for RBC. This would require a great deal more work than the reserve requirement, which would apply only to new business issued after the effective date. There is concern that the RBC requirements and reserve requirements may not be consistent with each other, due to a perceived lack of coordination between the groups responsible for developing these separate proposals.
9. Simplifications to PBA treatment of supplemental benefits and other areas, including the policyholder behavior assumptions.
10. Simplifications to PBA treatment of reinsurance, particularly YRT excess of retention reinsurance.
11. Relief on experience reporting requirements for companies with immaterial experience. There is currently a proposal for simplified reporting requirements for companies with less than $25 million in life premium.
12. Relief on the expense of PBA review by an independent actuary. There is a concern that the total cost of PBA to smaller companies may put them at a competitive disadvantage.

I would emphasize that the above refers to life insurance issues only. Annuity issues are on a separate track and, while the annuity working group is behind the life working group in the development of PBA, they will have a proposal to present to the Life and Health Actuarial Task Force (LHATF) in September.

Dave and Craig met with William Leung, Stacey Haws, John Van Valkenburg, and Mark Birdsall in a breakfast meeting. During this meeting, the following issues were discussed:

1. The ACLI is about to have their second discussions with Treasury regarding PBA.

There are fewer legislative and regulatory steps involved in adopting PBA for RBC than for reserves. ...

2. The Consistency Working Group of the Academy is charged with ensuring that RBC and reserve PBA proposal are fundamentally consistent.
3. There are fewer legislative and regulatory steps involved in adopting PBA for RBC than for reserves, so it has a higher probability of being implemented and may be adopted first, even though it requires modeling all the in force. By the way, C-3 Phase 3 is identical to RBC under PBA.
4. Experience data submission details are still being developed. Long term, it could be an evolving tool for companies to use to help them see how their experience compares with the industry. The data submitted could include any transactions that relate to the modeled business: premiums, death claims, lapses, surrenders, policy loans, annuitization, partial withdrawals, ETI, RPU, dividend options, etc. This data resides in company administration systems and just needs to be submitted in an orderly way. There hasn't been any discussion about submitting asset data as yet. Dave hopes that this can be a value-added process like the preferred mortality project data currently being worked on.
5. Modeling is needed to determine whether requiring larger margins for smaller blocks of business (and companies) makes a material difference in reserve levels. If material, this larger margin requirement could create "currency" for larger companies to use in acquisitions, as well a pricing disadvantage for smaller companies to the extent they operate in the same markets as larger companies. Dave points out that such currency already exists today, since large companies can currently generate gains by selling off mortality reserves to the market, which is not an option for smaller companies. Some of these deals represent a market value equal to a tenth of the reserves. Therefore, if the currency available today is much larger than the new currency created by new PBA requirements, acquisitions activity may not be significantly affected.
6. Dave is cautiously optimistic about the state uniformity issue-outside pressures such as international accounting issues or the threat of federal regulation are a strong incentive for states to accept

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more uniformity. Dave has been making presentations to NCOIL members to help prepare the way for the needed legislative actions in implementing PBA. 2010 is a key year for international accounting standards and European capital requirements under Solvency 2, so we need to move forward to be consistent with this timing or other solutions may be imposed on us.

7. The Academy is working to support the new regulatory and industry culture and practices that will be necessary for PBA to work well.
8. Companies that are not as efficient will likely have this impact show up in reserves and capital in PBA. Either big or small companies can be inefficient.

Dave and Craig received the following feedback from the group:

1. The written words in LRWG documents are generally more onerous than the verbal descriptions given by Academy members, such as Dave Sandberg and Dave Neve.
2. Actuaries don't want to be required to use assumptions that don't make sense for the business being modeled.

In the afternoon, Dave and Craig met with the commissioner and representatives of the Utah Insurance Department and several Utah-domiciled companies, including Beneficial Life, Deseret Mutual, Equitable Life & Casualty, Great Western and Security National Life. Dave made a presentation based on PowerPoint slides he had prepared and distributed as handouts to the assembled group. Among the issues discussed were the following:

1. PBA may put a strain on actuarial resources. There will be a need for independent PBA reviewers, new hires at many companies and additional volunteer resources to serve on Project Oversight Groups for the new industry experience studies. It was pointed out that Canada has been able to provide for all of this needed support for some time now within its own country.
2. PBA should foster product innovation, helping consumers. Reworking the Standard Nonforfeiture Law will be a next step, helping to foster innovation. Setting assumptions for new product features would probably need to be coordinated with the independent reviewer.
3. International developments are in part driving the PBA project forward.
4. The tax code was not written with PBA in mind. The hope is to find philosophical common ground with treasury around the idea of establishing more appropriate reserves without needing to change the tax code.
5. The paradigm is changing to a risk analysis thought process. Dave used the example of a health exam for a person. The doctor performs tests, asks questions and distills all the results down to a relatively small set of recommendations for the patient. This smaller set of recommendations is what needs to be monitored.
6. A change to SVL is a three-year process and working with 51 legislative jurisdictions, whereas changes to RBC Instructions, APPM or Blanks and NAIC Examiner's Handbook, can be done much more quickly and uniformly. The new Standard Valuation Law (SVL) will reference the Valuation Manual, which can be updated through an NAIC process, like the RBC Instructions. The Valuation Manual may provide for coordination with RBC requirements.
7. Expressed areas of concern:
   a. Exclusion from stochastic processing-Material Tail Risk Test.
   b. Experience reporting for a myriad of assumptions-should be value-added as a research tool. Think five to 10 years down the road. This could be technology-enabled with little, if any, human intervention in the data collection process.
   c. Larger margins for smaller blocks of business may result in larger reserves and an uneven playing field.
   d. If PBA is just a rote compliance function, rather than adding value, it may put smaller companies at a disadvantage due to higher expenses and an uneven playing field.
8. Subgroup 4 of the AAA's Valuation Manual Team is working with LRWG on simplifications to the PBA process, including the Material Tail Risk Test.
9. Phase-in Example, with control of implementation of the phases through the Valuation Manual. As experience is gained with each phase, refinements in PBA can be implemented in the Valuation Manual.
   a. Possible Phase 1:
      i. Equity-indexed Life Products
      ii. Separate Account Life Products
      iii. Term with level guaranteed period of 20-plus years
      iv. UL with secondary guarantees of 20-plus years
   b. Possible Phase 2:
      i. In addition to Phase 1 products, all fund-based life products and all other individual term insurance
      ii. Implement Material Tail Risk Test
   c. Possible Phase 3:
      i. All other life products, except possible exemptions for Credit Life & Disability, Final Expense and Traditional WL.
10. Independent PBA reviewers should help promote uniformity in interpretation and application of PBR. So could a Centralized Regulatory Resource.
11. The insurance commissioner of each state would have authority to exempt single-state companies from PBA requirements.
12. Use of reinsurance could dampen the inequities introduced by requiring higher margins for smaller companies or a smaller company could enter into a relationship with a larger company.

13. The extra cost of PBR should be offset to some extent by adding value to the company in terms of understanding and accurately modeling and pricing its business.
14. Use of credibility in setting assumptions and margins would dampen the effect that good or bad management decisions have on the level of reserves and required surplus a company holds.
15. Possible Timetable
    a. VA RBC (C-3 Phase 2) already in place
    b. VA Reserves (AG VACARVM)-2007 possible, but not likely
    c. Valuation Manual—2007 possible
    d. Passing new SVL at NAIC—2007-2008
    e. Life RBC (C-3 Phase 3)—2008 year-end
    f. Life Reserves and SVL passed in state legislatures—2009. Implementation 1/1/2010
    g. Annuity Reserves and Annuity RBC—too early to tell. While lagging the life proposal, it could still be ready for 2010 implementation.

Final Thoughts

The material presented here is based on the author's notes, recollections and interpretations of what was said in the e-mails and meetings described. This is quite a lengthy summary, but with PBA it seems that "the devil is in the details." It is worth taking time to understand the details in order to form an opinion of what PBA will mean to your company. As you do, make an estimate of what you think PBA will cost your company to implement, including software, hardware, additional personnel or consulting fees, and the cost of the independent reviewer. Utah Commissioner Michie asked our assembled group for thoughtful, rational letters regarding what should be done regarding PBA and why. He was interested in our cost estimates. Taking action can help. Write a thoughtful, rational letter to your commissioner about PBA. Include your best estimate of what compliance with PBA will cost your company in the first year and in subsequent years. Doing so will give your commissioner a much better sense of the impact these new requirements might have.

It is not clear to the author that the NAIC has yet seen the fruits of the AAA Consistency Working Group's efforts to ensure the consistency of the reserve and RBC proposals. This consistency is critical to minimizing the cost impact of PBA on all companies. The National Alliance of Life Companies (NALC) has written letters to responsible parties expressing concern about this consistency issue and other PBA-related issues. Copies of these letters can be obtained from the NALC.

The uncertainty regarding tax reserves and the consistency of state adoption of PBA seem to be the wild cards in the entire PBA adoption process. Some actuaries and other tax professionals are concerned about how well the PBA proposal fits into the current tax code. The ACLI is having discussions with the treasury, so we may be getting better information on how valid these concerns might be. For many, the even bigger concern is if we end up opening a Pandora's Box: Congress trying to update the tax code to fit PBA in the midst of all the other possible political issues that would undoubtedly go along with that effort.

The state adoption issue is also uncertain. Will all the states uniformly adopt the Standard Valuation Law and Valuation Manual as eventually approved by the NAIC or will a number of states make significant changes to either or both documents? State differences in valuation laws have heretofore been a relatively minor issue. This may not be the case for PBA. Imagine being required to set assumptions and run your PBA models multiple times in order to satisfy requirements of several different states and then document all those results in separate memoranda and review them with the independent PBA reviewer. Would there be different reserves required for different states? Different blue books? Would there need to be multiple PBA reviewers in this situation? One hopes not.

The work of the Modeling Subgroup of the LRWG could play an important role in determining the structure and thresholds associated with the Material Tail Risk Test, as well as evaluating the effects of larger required margins on the modeling assumptions of smaller blocks of business. The playing field between larger and smaller companies is already uneven in some respects. How much more would the competitive playing field be tilted by PBA? The author hopes there are enough resources devoted to the work of this subgroup and that they have sufficient time to do a thorough job. The author believes they should represent a model company stepping through the various PBA requirements in order to test the practicality and desirability of various aspects of the PBA proposal. ●

New! At the Section Level! Section Scorecards

By Meg Weber

A leadership tool is being distributed to all Section Councils as part of their 2008 annual planning. Several years ago, the Society of Actuaries initiated the use of the Balanced Scorecard approach to measure trends over time. These metrics assist the SOA leadership, both volunteer and staff, in managing resources. The Balanced Scorecard is how the SOA measures the effectiveness of key programs and processes over time. Balance Scorecards and the associated metrics are principles of quality management.

In the past year, this tool has been created by section leaders and staff for use by the individual section council level. The same major categories used by the SOA have been applied to sections: *Operations, Financial, Learning & Growth and Stakeholders.* Underneath those categories are measures that relate more specifically to section activities and outcomes.

Why should you, section members, care? Well, *Operations* measures tie to the councils' abilities to plan and execute, but, the rest of the measures impact you as a member in a fairly direct way. For example, most sections seek revenues beyond basic dues to fund the activities and interests of the section (Category: *Financial*). When a section is successful in generating non-dues income, members win! And, you should know that for all sections, the most important measures tie to ***your*** satisfaction with your membership in the section (Category: *Stakeholders*). Some of the other chief metrics tie to: member engagement and volunteerism, participation by affiliate (fellow professionals) members and participation in SOA continuing education events. The measures are part of the "health and wealth" of sections and ones we will look at for long-term trends. We expect to revise them in the next several years as our experience grows.

The results of these metrics will be updated annually in a "Dashboard" format for each section council. *(See accompanying ACME Section chart for Dashboard format).* The use of this tool will assist your councils in decision making and planning and will be a useful addition in generating section interest and overall volunteerism.

Section Metrics for ACME Section
(Note: This chart is a hypothetical set of section metrics displayed in a dashboard format.)

		OUTCOME	METRIC MEASURE	SOURCE	TARGET	SELF ASSMT	ACTUAL 2007
STAKEHOLDERS	1	Member Satisfaction	% reporting satisfied or very satisfied	Section Membership Surveys	75% of respondents		
	2		% Retention Prior Year	SOA Database	85%		Run 4th Quarter 2006 to 2007 members
	3	Section member engagement	Volunteer participation	% or # of section members volunteering	75		Sept 07 report
	4	Section member enhancement	Ability to do jobs and compete in the market place - % reporting satisfied or very satisfied	Section Membership Surveys	70%		
OPERATIONS	5	Completing Objectives	Annual Plan results – on time, on cost, achieve results	Self-Assessment	70%, 80%, 70%		
LEARNING & GROWTH	6	More able and employable members	% SOA Member participation in sections	SOA Database	10% New ASA s join in 1st year		Section defines "market" Sept 07 report
	7		Number of Section members broken out by SOA and affiliate members.	SOA Database	5% growth over prior year		June 2007 month end vs June 2006
	8		Employer/Member perceived value of CE	Meeting/Seminar attendance records (proxy)	1.00		Sept report of prior 12 months
FINANCIAL	9	Sufficient resources to deliver on the priority projects for the plan	Within the Financial Guidelines established for the section (surplus .25 – 2.0)	On 4th Quarter Financial Statement	1.5<S<2.0		4th Q 2006 Financial Statement
	10		Actual vs. Budget (expense, revenue, surplus)	Section Treasurer Creates budget. Results added to 4th Quarter Financial Statement	.8<Expenses<1.2		

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Some Regulators Respond to Survey Regarding PBR

To prepare for the LHATF (Life and Health Actuarial Task Force) meeting at the NAIC (National Association of Insurance Commissioners) fall meeting, Subgroup 3 of the Valuation Law and Manual Team (VLMT) of the LRWG solicited survey information from regulators. This subgroup is dealing with the experience reporting requirements in the Principles Based Approach (PBA). The questions were designed to get some feedback on the scope of the experience reporting, whether any life products should be excluded and whether there should be reduced reporting requirements for smaller insurance companies or for certain products. Our section has been concerned about the possibility of reduced reporting requirements or exclusions of certain products.

SUMMARY OF REGULATORY RESPONSES TO SUBGROUP 3 SURVEY

Life Product Experience Reporting Requirements Regulator Survey

1. For the data call on Life Insurance product experience reporting initially after the operative date of the Valuation Manual, what do you believe is the appropriate scope for the experience database? Note that collecting experience only from A. &/or B. may take a number of years of collection to achieve meaningful analysis results.

   A. Only policies subject to PBR and issued after Valuation Manual operative date
   B. ALL policies issued after Valuation Manual operative date
   C. ALL policies from which experience was used or is intended to be used for experience studies supporting PBR valuation assumptions.
   D. ALL policies, issued both before and after the Valuation Manual operative date
   E. Other (please specify in space below)

Regulator	Regulator Response/Comments to Question 1
1	C.
2	D.
3	C.
4	Ideally, I would think C is most appropriate, but I'm concerned with the "intended to be used" clause. Seems like there is potential for manipulation. Lacking well defined rules in C, I would then lean toward D.
5	A.
6	D.
7	D.
8	D.

2. What Life Insurance product types, if any, should be excluded from experience reporting requirements?

   A. None
   B. Only those product types excluded from PBR requirements (e.g., credit life)
   C. Additional product types should be excluded (Please specify product types)
   D. Other (please specify in space below)

Regulator	Regulator Response/Comments to Question 2
1	B.
2	B.
3	B.
4	B, though I'm counting on someone pointing out other products that it will probably make sense to exclude. Can't think of them off hand.
5	B.
6	A.
7	A.
8	D. Credit can be excluded as it is non-PBR and state data calls are currently performed. Small company exemptions may be considered if approved by domicilliary commissioner.

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3. Do you support reduced Life Insurance experience reporting for smaller companies or for certain types of products?

   A. No
   B. Yes, agree with qualifying criteria and simplified format drafted in Section b.4 of Appendix B
   C. Yes, plus exclude de-minimus blocks of insurance within qualifying criteria
   D. Yes, but use other qualifying criteria (Please specify below)
   E. Yes, but simplified format too detailed (Please specify further simplification needed below)
   F. Yes, but simplified format needs more detail (Please specify additional detail needed below)
   G. Other (please specify in space below)

Regulator	Regulator Response/Comments to Question 3
1	Yes, agree with qualifying criteria and simplified format drafted in Section b.4 of Appendix B; also no reporting required for product types excluded from PBR requirements.
2	D. Prefer qualifying criteria based on amount of ordinary life insurance in force, with benchmarks for reduced reporting and for exemption.
3	C.
4	Yes, definitely support reduced reporting for qualifying companies. Not sure I can choose (kinda F, kinda D). My understanding of section 2 format is "fields readily available in their systems/databases". If data fields are not available to fully populate a section 1 format, somehow flag those fields that they are not required due to small company exemption. But all submitted data would be identical in format. Also, if the variable studied is mortality, why not use death claim levels as the qualifying criteria? Large blocks of paid up insurance could be excluded if premium is used. Claims could be tied back to annual statements.
5	B.
6	D. Criteria would include a $10 M threshold, where the scope includes individually solicited group life insurance.
7	B.
8	B. may be OK but believe additional qualifying criteria could be developed that does not just rely on the amount of premium volume. Companies for example could have a lot of paid-up business.

4. Please provide any comments you may have regarding the various parts of the experience reporting requirements. For your convenience these parts are listed below along with space for comments.

Regulator	Comments
6	We plan on reviewing what is being done on the property side re: statistical agent requirements, licensing requirements, and their overall structure.

Provide any comments you may have for Part I (Overview) of Section 6.

Regulator	Comments
1	The wording of the first sentence in Part 1 paragraph d seems awkward. Suggestion: "Principles-based reserving requires reliable historical data from comparable policies, so that assumptions based on policy experience can be used."
4	Nothing worth commenting – I'll be interested to see how we will go about "establishing a quality threshold." Has this been done in P&C experience reporting requirements? My hope is that extensive validation is done by the company – a report showing validation.

Provide any comments you may have for Part II (Company Experience Reporting Requirements) of Section 6.

Regulator	Comments
1	In the next-to-last sentence of II b.4., "exception" seems better than "exemption."
4	We will probably agree on additional lines that it will be appropriate to exclude as the work progresses.
6	Section II.b.1.ii, change "Companies doing business in only their state of domicile" to "Companies licensed only in their state of domicile."

Provide any comments you may have for Part III (Roles and Responsibilities) of Section 6.

Regulator	Comments
1	In part a. we say that the contents of statistical plans are unlikely to change. In part b. we say that we will seek to update the requirements regularly. Should one or the other of these be reworded? III c. (10) seems like a concluding comment not just applicable to the SOA and AAA, but to the statistical agents, regulators and industry. Perhaps this statement belongs elsewhere in the document.
4	Not critical, but I don't agree with paragraph 2 of IIIa, the "statistical plans… are unlikely to change." To ensure the plans are responsive to change and continue to be useful, I would expect they need to change overtime(?) III c 3 change "key" to "required." What are key companies? Aren't they all? An additional role of the professional organizations would be the study of potentially new variables. Perhaps c 8 would include "and new variable studies" at the end.
6	Section III.a. Not sure what the purpose is of the second to last sentence of the second paragraph (starts "Factors to be considered…").

Provide any comments you may have for Part IV (Data Quality for Insurers and Statistical Agents) of Section 6.

Regulator	Comments
1	In the first sentence of IV.f(ii), suggest inserting "disclosure of" in front of "personal information."
6	There is a typo in the reference in Section IV.e.iv.(3), it should be "6.IV.e.iii". Remove Section IV.e.v. Section h – fines/penalities should be at the discretion of the Commissioner.

Provide any comments you may have for Part V (Reports Available from Statistical Agents) of Section 6.

Regulator	Comments
6	Section V.b, needs a closed parenthesis at the end of the section. Section V.c, last sentence of the third paragraph, change "evaluate principles-based reserves" to "evaluate non-formulaic assumptions." Section V.d, last sentence of the first paragraph, change "evaluate principles-based reserves" to "evaluate non-formulaic assumptions." Section V.f, last sentence of the last paragraph, change "evaluate principles-based reserves" to "evaluate non-formulaic assumptions."

Provide any comments you may have for Appendix B including introduction and statistical plan detail.

Regulator	Comments
1	Traditional first to die and second to die plans indicate for the company to submit separate records for each life. Should this also apply to UL/VUL? Is there enough "group UL" in force with individual certificates that such business should be considered?
4	I don't understand the line on page 12 of Appendex B – "When the data format for smaller companies becomes identical with the Section 1, Data Format, the extent of data call and time frame of data call will become the same as Section 2." Should this say "…will become the same as Section 1"? I am also wondering what is gained by allowing the submission of grouped data?
6	Will this format ensure that the underwriting criteria score will be able to be mapped to mortality rates?

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Subgroup 4 of the VLMT deals with ways to simplify and implement PBA. Their survey was designed to obtain feedback on the scope of products to be included on the initial operative date of PBA (if it passes). This subgroup, of which I am a member, has tried to prioritize which products will be included on the operative date. Many companies do not write certain products, so, this initial exclusion will cut down the number of companies which must come under PBA. This will give regulatory staff time to accustom themselves to the process. In addition, it will delay implementation for many smaller companies. Only the most risky products, which seem to have attracted the most attention, would be included.

We compiled a list of all life and annuity products. We had done a preliminary survey in May, and based on this we indicated a "yes" on certain products which we think will be included. In the following list, they are numbers 28-29, 32-34 and 36-39, or term with X factors less than 100 percent, Return of Premium term, UL with an equity index or having a significant secondary guarantee, and variable life. Regulators were asked to comment on this list.

Also, we asked about the initial exemption of some broad product areas—health, credit life and disability and group term. We also asked about other products and whether their decisions might change if the mortality assumption was adequate.

SUMMARY OF REGULATOR RESPONSES TO THE SUBGROUP 4 SURVEY

1. Do you agree with the exemption from principles-based reserves on the operative date of the VM for products listed here:

   1) Accident & Health Insurance (A&H)
   2) Credit Life & Credit Disability
   3) Group Term Insurance (annually renewable)?

Regulator	Response/Comments
a	I am not sure about A&H, particularly Long-Term Care. If there are no formula reserves, why should there be an exemption from PBR?
b	Yes.
c	Yes, assuming exemption for A&H Insurance is not intended to extend indefinitely.
d	Yes.
e	No. We do not agree with A&H being exempted. We think that credit insurance standards can be improved through a study. We think there is a need for a new group table, and data is needed in this area.
f	Yes.
g	Yes.

2. Do you agree with the list of products indicated on the Product List to be subject to PBR on the operative date of the VM (these products are indicated with a "Y" in the Phase 1 column, based on responses from the May Subgroup 4 survey)?

Regulator	Response/Comments
a	No. I have a problem with term life insurance. What is the difference between indeterminate premium term and renewable term? The nature of the premium guarantee does not seem like much of a difference. An exemption for X factors = 100%, but not for X factors <100% is contrary to the Valuation of Life Insurance Policies Regulation and ASOP No. 40. Once an opinion is required, it is required for all the business subject to the regulation. Merely calling substandard business "standard" when standard is called "preferred" does not excuse X factors of 100% if higher is appropriate.
b	Yes.
c	Yes.
d	Yes.
e	No. Should also include products where formula reserves are currently inadequate, including payout annuities.
f	Yes.
g	Yes.

3. Please indicate any additional products from the Product List that you believe should be subject to PBR on the operative date of the VM. You may either list these products by name or by "ID Num" in the comments below or you may simply place an "x" by these products in the first column on the Product List and submit this list with your response.

Regulator	Response/Comments
a	See comments in response to question 2 above.
b	The current list of products indicated with the "Y" seems to be sufficient, if a gradual implementation PBR is desired.
c	Product ID Numbers 51 - 56, 58, 60 - 63.
d	52 & 53. Which will come first, VM operative date or rewrite of AG VACAVRM?
e	60, 61, 62, & 63 (life annuity, certain & life annuity, refund annuity, joint and survivor annuity respectively).
f	Product ID Numbers 47 thru 58.
g	Products subject to VACARVM and other life products. Products in question 1 can be excluded along with preneed. Transition for companies or types of companies and certain products subject to PBR could be considered to allow time to implement. PBR for non-variable annuities desirable if ready but could be implemented later after the operative VM date.

4. Products involving life contingencies on the Product List are only individual products. Please indicate which group products should be subject to PBR on the operative date of the Valuation Manual. These are group products other than annual renewable term. Please list the "ID Num" from the attached Product List on the comments lines below and indicate that this is the group version of this product.

Regulator	Response/Comments
b	Group versions of 33, 34, 37, 38, 39.
c	Group products should be included to the extent they correspond closely to individual products.
d	I am open to discussion here. My general feeling is to keep implementation as simple as possible at the operative date. However, I don't believe including group forms will make it that much more onerous on the companies or the regulators if we stick to the few initial products.
e	Group annuities (60, 61, 62, 63). Individually solicited group life insurance (same ID numbers as previously selected). We need to think about other blocks, too.
f	Same as individual response (all Product ID Numbers marked with a "Y" plus Product ID Numbers 47 thru 58).
g	Group versions of individual products subject to PBR.

5. For any products that you have indicated that should be subject to PBR on the operative date of the VM, please indicate whether your response would change if assurance could be provided that the mortality assumption underlying the current non-PBR reserves was adequate. Examples of products that could fall into this category are small face final expense or pre-need life insurance.

Regulator	Response/Comments
a	How can you provide such assurance? I have yet to see the appointed actuary opine that management has moved forward on the basis of unsound assumptions. "Anticipated mortality" is the mortality that supports the opinion.
c	No, my survey response would not change.
d	Mortality only? I want to say "yes," but how will that assurance be provided? In line with an overall shift to focus on where the risks are, if it could be shown somehow that the mortality assumption was adequate, I would agree that those products ought to be excluded.
e	For small face and pre-need, we would want expenses to be reflected, also.
f	Same except #28 (renewable term).
g	Not sure how such assurance could be provided.

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6. Would you be willing to allow Universal Life products with minimal secondary guarantees (e.g., as provided in Appendix A-830, paragraph 3a of the APPM) to be exempt from PBR on the operative date of the Valuation Manual, with the clear understanding that once a Material Tail Risk test is implemented that it would be included in PBR? (If the Material Tail Risk test has been implemented, this may not be necessary).

Regulator	Response / Comments
b	Yes.
c	Yes.
d	Probably.
e	No. We would want to ensure that the Material Tail Risk test is legitimate before granting any exemptions on secondary guarantee blocks.
f	Yes.
g	No.

PRODUCT LIST (Subgroup 4)

Notes:

- Products on this list include products in addition to life insurance such as annuities and deposit type products.
- Benchmarking was done with the APPM where a few references from the APPM were made to provide additional information.
- The first column is for your use to indicate which products you believe should be subject to PBR on the VM operative date.

"Phase 1" column contains a "Y" for life products where responses from the May survey have significant support for PBR on the VM operative date.

ID Num	Product Type	SSAP 50 Par #	SSAP	App A	App C
1	Deposit-Type Contracts (no life contingencies involved)	44	52		
2	Supplemental contracts with no life contingencies	44			
3	Lottery payouts	44			
4	Structured settlements	44			
5	Guaranteed interest contracts	44			
6	Synthetic GIC's			A-695	
7	Income settlement options	44			
8	Dividend and coupons accumulations	44			
9	Annuities certain	44			
10	Premium and other deposit funds	44			
11	Funding agreements (specified type – see SSAP 50, par 44)	44			
12	Funding Agreements - other				
13	Group deposit administration contracts				
14	Life Insurance (Ordinary Life & Industrial/Debit Life)	9,10	51		

15	Whole Life Contracts	11			
16	Traditional Whole Life Insurance – no dividends	11			
17	Traditional Whole Life Insurance – no NGE	11			
18	Traditional Whole Life Insurance – with dividends	11			
19	Indeterminate premium life insurance	11			
20	Final Expense Life	11			
21	Pre-need life	11			
22	Endowment contracts	12			
23	Pure Endowment Contracts	12			
24	Term life contracts	13			
25	Indeterminate premium term life insurance	13			
26	Annual renewable term	13			
27	Renewable term insurance (A-830 "x" factors = 100%)	13			
28	Renewable term insurance (A-830 "x" factors less than 100%)	13			
29	Renewable Term Insurance – with return of premium	13			
30	Supplementary contracts with Life Contingencies	14			
31	Acceleration of life insurance benefits (not subject to A-641, LTC)			A-620	AG27
32	Universal life type contracts	17		A-585	
33	Equity Indexed Universal Life Insurance	17			AG36
34	Universal Life with long term secondary guarantees (guarantee to 100, life guarantee)	17			
35	Universal Life with minimal secondary guarantees (qualifies under Valuation of Life Insurance Policies Model reg, Section 3(A)(2)	17		A830	
36	Variable life contracts	17		A-270	
37	Variable life with guaranteed minimum death benefits	17			AG37
38	Variable universal life	17			
39	Life policies with guaranteed increasing death benefits based on an index				AG25
40	Modified guaranteed life insurance			A-588	
41	Limited payment contracts	18			

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42	Single premium life	18			
43	Annuity Contract (annuities below are deferred unless specified as immediate)	20	51		
44	Deferred Annuity	20a			
45	Traditional deferred annuities (single/flexible premium fixed)	20a			
46	Charitable annuities	20a			
47	Market Value Adjusted Annuities	20a			
48	"CD" Annuities	20a			
49	Two-tiered Annuities	20a			
50	Modified Guaranteed Annuities	20a		A-255	
51	Variable Annuity	20b		A-250	
52	Variable annuity with minimum guaranteed death benefit				AG34
53	Variable annuity with guaranteed living benefits				AG39
54	Annuity contracts with elective benefits				AG33
55	Variable Immediate Annuity	20c,d,e,f,			
56	Fixed (Equity) Indexed Annuities	20a			AG35
57	Bond Indexed Annuities	20a			
58	Interest-Indexed annuities	20a		A-235	
59	Pre-need annuity	20a			
60	Straight-life annuity	20c			
61	Life annuity (with period certain)	20d			
62	Refund annuity	20e			
63	Joint and survivor annuity	20f			
64	Benefit riders – ADB, waiver of premium, guaranteed insurability		51,p33		

Comments accompanying the surveys are courtesy of James R. Thompson, FSA, MAAA. Thompson is the newsletter editor and is employed with Central Actuarial Associates.

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