The Financial Reporter

Indexed Universal Life: US GAAP Financial Reporting Practices

By Katie Cantor and Guillaume Briere-Giroux

The views expressed are the authors' own and may not represent the views of Oliver Wyman.

Ithough indexed universal life (IUL) products have existed for more than 15 years, there continues to be a wide range of IUL US GAAP¹ financial reporting practices. This observation prompted Oliver Wyman to perform an industry survey of IUL financial reporting and risk management practices, which was completed in 2014. Background on IUL financial reporting and risk management survey

- 21 participants
- Accounted for 76% of 2013 sales
- Have written IUL for 6 years, on average
- Total face amount of nearly \$200B

This article provides a brief overview of IUL US GAAP financial reporting and expands on the following three survey findings:

- 1. More than 70 percent of participants use simplified FAS 133 approaches for IUL GAAP liabilities,
- 2. Full-blown FAS 133 approaches² have not converged, and
- 3. US GAAP creates the most significant financial reporting challenge for IUL.

IUL US GAAP OVERVIEW

Under FAS 133, the liability is bifurcated between an embedded derivative (ED) and a host contract liability (host). The ED measures the value of the derivative features embedded in the contract, such as index-linked

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Challenging Times CHAIRPERSON'S CORNER

By Tara Hansen

or many years we have thought that we would be in the midst of dramatic changes on the financial reporting front. We thought we would be implementing new accounting frameworks for statutory purposes in the form of principle-based approaches and fair value type calculations for GAAP reporting purposes. These implementations would have put tremendous pressure on our actuarial organizations and would have been a sea change for financial reporting actuaries across North America and the globe. Although these frameworks have not materialized as soon as we expected, we have found ourselves under significant strain as we begin 2015, driven by various events.



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The biggest stressor has been the prolonged low interest rate environment. We may have optimistically thought we were out of the woods in the first half of 2014, but dramatic drops in interest

rates at the end of 2014 reversed that position, causing significant additional work to be performed for reserve adequacy analysis under statutory and GAAP frameworks alike.

In addition to the low interest rate environment, we are also undergoing a period of regulatory reform in the United States driven by state and federal regulators which is beginning to impact the financial reporting realm. Late in 2014, Actuarial Guideline 48 (AG 48) was adopted by the NAIC, providing for stronger asset requirements for captive insurers. AG 48 introduces the use of principle-based approaches to determine the level of allowable assets required in captive arrangements formed in 2015 and later as well as newly issued contracts in 2015 and later that are added to existing captive arrangements. For companies that previously had no capability to calculate principle-based reserves, this will present additional challenges during 2015.

Also in the United States, as we move through 2015, we expect additional movement on the principle-based reserve front as the NAIC feels pressure from federal regulators to complete the development and adoption of the principle-based requirements for U.S. statutory reserves. The Financial Accounting Standards Board (FASB) is continuing to review targeted improvements to U.S. GAAP, which will likely consist of opportunities to join the debate during 2015, but no final changes are expected this year.

In Europe, the International Accounting Standards Board (IASB) is continuing to move toward finalizing its accounting standard for insurance contracts. This standard will apply to Canadian insurers and U.S. subsidiaries of European insurers, so these companies are beginning to develop implementation plans in anticipation of the final standard.

Although we are not in the midst of the big bang of change we might have been expecting, the slow changes together with the prolonged low interest rate environment are proving to keep our lives in the financial reporting arena plenty challenging!

liabilities. Generally, the ED is sensitive to capital market movements (e.g., index performance and interest rates), whereas the host is more stable and accrued using a fixed interest rate locked-in at issue.

MORE THAN 70 PERCENT OF PARTICIPANTS USE SIMPLIFIED FAS 133 APPROACHES FOR IUL LIABILITIES

Participants were asked to categorize their IUL US GAAP liability approach, ranking from simplified approaches (e.g., using FAS 97 or a simplified FAS 133) to using full-blown FAS 133 approaches (i.e., bifurcation and discounted cash flow method for the ED). The range of approaches used by the 21 participants is described in the exhibit below:

Question: Describe the reporting methodology of your IUL GAAP liabilities excluding secondary guarantees
Reporting methodology for IUL base contract indexed account US GAAP liabilities
FAS 133 Option budget method 5 Stochastic approach 1
Simplified FAS 133 Account value + current option value 11
"Swap method"
Other 1
FAS 97 Account value only 3
Note: One participant reported multiple approaches (more than one block of business)

Exhibit 1

Only six participants out of 21 claim to use a full-blown FAS 133 approach. That is, more than 70 percent of participants use some form of simplified approach. Among the simplified approaches, the "account value plus option value method" was reported as the most frequent. Under this method, the ED only reflects the option value associated with the current indexed crediting term.

We believe that the prevalence of simplified approaches is driven both by the lack of IUL-specific guidance and the complexity of full-blown FAS 133 methods. The complexity and wide range of full-blown FAS 133 approaches were confirmed by the survey and are discussed further below.

FULL-BLOWN FAS 133 APPROACHES HAVE NOT CONVERGED

Several additional survey questions focused on full-blown FAS 133 methodologies. The main areas of variation in

CONTINUED ON PAGE 4

practice were summarized in the table below. The last column highlights implications relating to methodology choices; these implications are not exhaustive and there are many more aspects to consider.

AREA OF VARIATION	PRACTICES REPORTED	IMPLICATIONS OF METHODOLOGY CHOICE
Inclusion of future premium in the run(s) supporting ED excess cash flows.	 Future premium can be included or excluded. Both approaches were used by participants. 	• Excluding future premium will reduce the projected fund value and likely cause early lapses; the time horizon for the excess cash flows will be limited, reducing the ED.
		 If future premium are excluded, actual new premium will create a variance on the ED associated with prior premium.
Approach to calculate guaranteed cash flows.	 Notional approach (e.g., track a sepa- rate guaranteed account) versus a sepa- rate projection to obtain guaranteed cash flows. 	 If a separate projection with zero index growth is used, the policy funding and policyholder behavior in the "guaranteed run" will devi- ate from the "best estimate run."
	• Both approaches were used by participants.	
Cash flows included in ED	 Liability cash flows (e.g., death benefits, surrender benefits, partial withdrawals) were included by all participants. 	 The cash flows included in the ED will impact the unwinding of the liability and resulting income emer- gence.
	• Account value-based charges were included by some participants.	
ED discount rate	• Treasury rates plus non-performance spread was the most common.	 Choice of discount rate and basis for non-performance risk spread impacts the volatility of the ED.
	 Other approaches included Treasury rates, swap rates, or swap rates plus spread. 	,
Premium bifurcation	 Account for premium payments separately. 	• Complexity of valuation calcula- tions and underlying data feeds.
	• Group premium payment for purpose of bifurcation.	
	• Pro-rata approach—not typically done in practice.	
Host accrual	 Some but not all participants recalculate the host value as the present value of guaranteed cash flows. 	 Methodology can impact the "smoothness" of the host accrual.
	 The host accrual rate is restated either at each valuation period, at the end of a credited term, or upon payments or withdrawals. 	

In summary, and as expected when the survey was initiated, full-blown FAS 133 approaches have not converged.

US GAAP CREATES THE MOST SIGNIFICANT FINANCIAL REPORTING CHALLENGE FOR IUL

Despite the frequent use of simplified FAS 133 approaches, most participants mentioned US GAAP income emergence-related issues as being their most significant financial reporting challenge:

Exhibit 2

Question: What are the top three challenges in analyzing and understanding income emergence for this business?



On another survey question, nearly all participants reported model complexity, largely due to US GAAP, as being a significant barrier to producing quality financial reporting results.

SUMMARY

IUL US GAAP financial reporting is complex and IUL writers are facing significant challenges related to methodology, modeling and analysis of results. In absence of IUL-specific guidance from FASB and with the rapid growth of the market, we expect the debate on implementation approaches to continue and to gain greater attention.

ENDNOTES

- ¹ US GAAP guidance can be found in ACS 944 & 820, formerly SFAS 133 and SFAS 157. For simplicity, this will be referred to as FAS 133 in this article.
- ² Defined as using bifurcation and using a discounted cash flow method for the ED (option budget method or stochastic method).



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Streamlining Actuarial Documentation and Testing Requirements

By Mark Birdsall and Larry Bruning



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or the life insurance company statutory annual statement, how many actuarial filings might a company potentially make? It turns out that depending on a company's product portfolio and other matters, company actuaries might be required to submit between 20 and 30 actuarial filings to state regulators. These filing requirements have emerged over time, developed by different people to meet various needs.

With the emergence of ORSA and the Principle-Based Approach (PBA) to determining reserves and riskbased capital, perhaps this would be an opportune time to step back and take a holistic look at this variety of filing requirements and see what can be done to make things better for both companies and regulators. Last summer, the NAIC approved and funded a project to do just that, to review all the current (pre-PBA) actuarial documentation and testing requirements for life insurance companies (i.e., companies preparing Blue Book statutory financial statements) and streamline them to remove redundancy, improve efficiency, and make the information more useful to both regulators and companies. The approved project has three phases:

Phase 1-Initial analysis

A consulting firm will be hired to review, after suitable confidentiality agreements are in place, all the 2013 actuarial filings for 15 to 20 companies and provide two deliverables:

- a. Recommendations for streamlining the actuarial testing and documentation requirements for those companies; and
- b. A database design to electronically capture the key information from those filings.

Phase 2-Field test

Participating companies and regulators will review the recommendations from Phase 1 and provide suggestions for improvement to both a. and b. above. These companies will provide their 2013 actuarial filings to the selected consulting firm and submit their 2015 actuarial filings on the streamlined basis. Participating regulators will review those filings and the database created from those filings. Both companies and regulators will provide their feedback on the streamlined doc-

umentation and testing requirements and the regulators will provide their feedback on the populated database.

Phase 3-Implementation of streamlined actuarial documentation and testing requirements

The regulatory documents needed to implement the streamlined requirements will be amended and worked through the NAIC approval process. These regulatory documents would likely include regulations, actuarial guidelines, and risk-based capital instructions.

Participating companies would be asked to do three basic tasks: (1) at the proper time, submit their 2013 actuarial regulatory filings to the consulting firm that has been hired; (2) review the Phase 1 recommendations and provide suggestions for improvements; and (3) make 2015 actuarial submissions on the streamlined basis, providing additional suggestions for improvement. At the time of this writing, 18 companies have agreed to participate in this project.

Participating regulators would be asked to do the following four tasks: (1) consider allowing participating companies domiciled in their states to submit the actuarial filings for 2015 only on the streamlined basis, rather than submitting both the streamlined basis and the current basis; (2) review the Phase 1 recommendations and provide suggestions for improvement; (3) review the 2015 actuarial submissions on the streamlined basis and the populated database and provide suggestions for improvement; and (4) assist in updating the regulatory documents to implement the streamlined actuarial reporting and documentation requirements. At this time, 11 state regulators have agreed to participate.

The database created from the streamlined documentation would likely include key information such as best estimate assumptions, margins, and key numerical results. When populated, this database can provide the basis for a new type of aggregate industry study: expected future experience for key assumptions. These aggregate studies can provide a new source of guidance for actuaries to use in setting and reviewing modeling assumptions. They will be particularly useful for those assumptions for which there is not yet relevant, credible historical experience. To facilitate such studies, it is critical that the assumptions be kept in context so that studies can be made of relatively homogeneous risks i.e., keep apples with apples.

In addition to providing a rich new source of information for setting modeling assumptions, the database could help reduce the cost of regulatory oversight for PBA. Both companies and regulators are rightly concerned about the potential cost of PBA oversight. We already have some experience in reviewing models through asset adequacy analysis and Actuarial Guideline 43. In some cases, reviewers have gone to the nth degree in reviewing models and assumptions. Could this become even more onerous under PBA? How could the new database help mitigate this potential problem for both companies and regulators?

First of all, the current process of reviewing actuarial memoranda is manual and very inefficient. Each appointed actuary has developed his or her own style and organization of material in the various submissions. To the extent there are multiple submissions (potentially 20 to 30 of them) this makes the review even more difficult. Standardizing formats, eliminating duplication, and basing the documentation on best estimate assumptions with margins documented separately and sources of assumptions made clear should help streamline the review process.

Second, the aggregate studies on these data should allow the reviewer to much more quickly identify outlier assumptions, if any, and to drill down for more information on those outliers, spending much less time on assumptions that are clearly in line with industry expectations of future experience.

Third, separately identifying the margins in the database will enable reviewers to clearly identify the sources of margins in the reserves. The size of margins can be easily determined and, together with the sensitivity testing results, the degree of statutory conservatism can be estimated. Compiling this information across the industry will be an important part of the feedback loop for PBA and enable ongoing improvements over time to get closer to the goal of "right-sizing" statutory reserves.

What about timing for this streamlining project? With respect to Phase 1, a second Request for Proposal (RFP) is being developed at the time of this writing (early Jan. 2015). An initial RFP was sent out last year with six proposals forthcoming. However, several important parameters of the project have changed, so a new RFP is required. It is hoped that selection of the consulting firm will be completed during the first quarter of 2015. Phase 1 would be completed by the end of the second quarter of 2015. At that time, the participating companies and regulators will begin reviewing and providing feedback on the Phase 1 recommendations and getting ready for the Phase 2 field test with respect to 2015 financial reporting. The Phase 3 work on regulatory documents can actually begin once the requirements for the Phase 2 field test have been agreed upon. Of course, performing the field test will bring additional recommendations for improvement, but those changes can also be incorporated into the Phase 3 drafting of changes to the affected regulatory documents.

Final thoughts: both testing and documentation requirements are on the table for this project. While PBA is not effective yet, it would seem logical and prudent that the emerging PBA testing and documentation requirements would be impacted by this project and that key PBA information would eventually be collected electronically as well. With the new historical experience reporting under PBA, together with new studies of aggregate industry expected future experience and margins for material assumptions, the potential for improved pricing and modeling by life insurance companies is significant.

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Reconciling The Opening And Closing Balance Of Insurance Liabilities—It's Important!

By Jim Milholland

he topic once again is IFRS for insurance, with the usual set of acronyms; namely, the revised Exposure Drafts (ED) and the International Accounting Standards Board (the Board). RA stand for the risk adjustment and CSM stands for the contractual service margin. P&L is profit and loss and OCI is other comprehensive income.

This time it's about the analysis of the movement in the liability. It applies to contracts that use the building blocks (i.e., those that do not use the alternative approach) and to claims liabilities.

It may be a boring subject. But bear with me and I'll help you avoid some real difficulties that will occur if you don't take it seriously enough.

The analysis, which the second ED refers to as a reconciliation of the opening and closing balance of the liabilities, has been a part of the Board's thinking from the beginning. The revised ED would make it a required disclosure. If memory serves me, the commenters on the ED expressed no objections to the requirement to disclose the reconciliation. Silence is consent, so apparently many people see the value in the reconciliation. Or perhaps they see it as "just a disclosure," one of those things that you do late in the reporting process after the pressure to release earnings has passed, and reasonable enough, so there is no need to object to it. The goal of this paper is to convince you that the reconciliation is indeed valuable.

The description in the revised ED is succinct. In paragraph 78 it says that the reconciliation should be made for each component separately and it specifies that the reconciliation should show premiums, claims, relevant amounts recognized in profit or loss, gain or losses on modification or de-recognition of contracts, and any additional amounts needed to understand the change in the liability. It is left to the actuary to work out the details.

And there are details. In addition to the expected progression, the reconciliations will be affected by experience deviations, changes in estimates, changes in discount rates, re-measurement of the risk adjustment, and the effects of acceleration or deceleration of cash flows. The last items are the effects on the liabilities of the fact that experience deviations result in more or fewer contracts than had been expected.

The disposition of the reconciling items is important. Some go to P&L, others affect OCI, and others are caught up in CSM. Some, like premiums and repayments, are simply deposits or withdrawals and affect the liability directly.

It is evident that the reconciliation will be challenging. Nonetheless the reconciliation can be well-defined and a process can be put in place to make it routine. With some forethought, the items that are needed can be captured, either from the models that measure the liability or from general ledger accounts. There is really no new information that must be created to do the reconciliation. There is however the need to capture the required information and this need should be anticipated as the reporting process is set up.

So the important point for now is not the details of the reconciliation, but why it is important - why it is not just a required disclosure that can be left to the late stages of the reporting process. The answer is twofold.

The first reason the reconciliation is important is because it is a significant control on the measurement of liabilities. The liability calculations are complex and dynamic. The ability to reconcile the results from the prior period to the end of the current period is key to developing comfort that nothing material has gone wrong. The reconciliation should flow from the data gathered in the valuation process and the reconciling items should appear reasonable when compared from period to period. Difficulties reconciling the liabilities from the information provided by the routine valuation process or peculiarities in comparative amounts may indicate that something has gone wrong with the valuation.

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The reconciliation is also important because there is valuable information in the reconciliation that may not be apparent from looking at the financial statements. I expect that readers of financial statements will be especially interested in the progression of the CSM and the RA. The CSM is already characterized by some actuaries as future profits. Readers of financial statements will look to the progression of the CSM to get a view of the insurer's future prospects. They will want to know if CSM is growing and why. CSM that is growing bodes well for the future. They will also want to know how much new business is adding to CSM, to get an indication of whether margins are being maintained on new business. They will be interested in how much the changes in estimates affect new CSM, and they will use this information to form a view about whether the insurer has been optimistic or conservative in setting expected values.

The RA will also likely be viewed as future profit. Its contribution to profit is less assured and more volatile than the contribution from CSM, but if in fact the value of future cash flows is an expected value, then the RA is expected to contribute to profit over time. The addition from new business and the effects of re-measurement

of the RA will influence reader's evaluation of the performance and prospects of the insurer.

The statement of comprehensive income will not provide the details needed for these evaluations. Hence the disclosures become very important.

For these reasons the reconciliation of the liabilities should not be left to late in the reporting process. It should be made before the measurement of liabilities is final and earnings are released. If I am right about the attention that readers will give to the reconciliations, insurers may in fact decide to report elements of the reconciliations as part of the information provided with the earnings release.

So the moral of the story is this: embed the reconciliations into the valuation process. Design the models and valuation systems to capture the required information when the measurement is made. This forethought will avoid the possibility of needing to re-engineer the systems when the importance of the reconciliation becomes obvious, and it will greatly reduce the chance of a material error in the measurement of liabilities. The reconciliation of liabilities is as important as the measurement itself and an appreciation of this fact should become part of the mindset of actuaries involved in IFRS reporting.

Myth, Magic and Mysticism

By Henry Siegel

DEFINITIONS FROM GOOGLE

Myth - a traditional story, especially one concerning the early history of a people or explaining some natural or social phenomenon, and typically involving supernatural beings or events.

Magic - The power of apparently influencing the course of events by using mysterious or supernatural forces.

Mysticism - belief that union with or absorption into the Deity or the absolute, or the spiritual apprehension of knowledge inaccessible to the intellect, may be attained through contemplation and self-surrender.

here have been times recently when I have thought of one or all of these words in connection with the International Accounting Standards Board's (IASB's) insurance contracts accounting project.

For instance, there was this headline in The New York Times: "Insurers Use Deals to Avoid as Much as \$100 Billion in Taxes!" The article involved the use of captive reinsurers to move liabilities around inside a holding company. Surely this kind of accounting manipulation could be viewed as actuarial magic by some. Earnings were created mysteriously by the use of a pen and paper rather than any change in real financial situation. Avoiding the growth of this kind of actuarial magic is surely why the IASB has written such detailed guidance for how to calculate liabilities.

Furthermore, as the board delves ever more deeply into the details of accounting principles for participating contracts, the discussions become more and more difficult to follow, taking on a nearly mystical quality. Only actuaries and a few accountants who have spent extensive time studying the theory behind the discussions will be able to understand the final conclusion. It then becomes our job to explain results in a way that is clear and simple rather than inaccessible.

The word myth has been adopted in recent times to mean any false belief or statement. So we discuss the myth that an insurance company can be systemically risky or that you have to hire an investment banker in order to do an acquisition. I prefer the traditional definition above, however, and have been wondering what myths there will be in the future about current times.

Will our successors say today's actuaries invented International Financial Reporting Standards (IFRS) in all its complexities to keep actuaries fully employed? Will the long development period be attributed to obstruction from insurance companies or the Financial Crisis of 2008? What other myths might develop to explain the origins of IFRS for insurance?

Whether actuaries become the subjects of myth also will only emerge over time. We are, though, in danger of becoming both the magicians and mystics of insurance accounting. Almost half the balance sheet and all the income statement will be made up of numbers calculated by actuaries rather than accountants. I'm not sure, however, that this is what we should aspire to be. Making it clear we are neither magicians nor mystics will inspire confidence in us as a profession.

If this quarter demonstrated anything, however, it's that either the IASB has become tired of the topic or the resolution of outstanding issues is proving to be very difficult. Only one decision making meeting was held on insurance, along with a single educational session.

OCTOBER MEETING

The IASB met on Oct. 23, 2014 to discuss an entity's initial application of the forthcoming Insurance Contracts Standard for non-participating contracts.

"The IASB tentatively decided to confirm the 2013 Exposure Draft on Insurance Contracts (2013 ED) proposals that at the beginning of the earliest period presented:

- a. an entity should apply the Standard retrospectively in accordance with IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors unless impracticable.
- b. if retrospective application of the Standard is impracticable, an entity should apply the simplified approach proposed in paragraphs C5 and C6 of the 2013 ED with the following modification:



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... either the IASB has become tired of the topic or the resolution of outstanding issues is proving to be very difficult.

> instead of estimating the risk adjustment at the date of initial recognition as the risk adjustment at the beginning of the earliest period presented, an entity should estimate the risk adjustment at the date of initial recognition by adjusting the risk adjustment at the beginning of the earliest period presented by the assumed release of the risk before the beginning of the earliest period presented.

The assumed release of risk should be determined by reference to release of risk for similar insurance contracts that the entity issues at the beginning of the earliest period presented."¹

This change was made as a result of comments on the ED that the Board had received from preparers.

"The IASB also tentatively decided that:

- a. if the simplified approach described in paragraph (b) above is impracticable, an entity should apply a fair value approach in which the entity should:
 - i. determine the contractual service margin at the beginning of the earliest period presented as the difference between the fair value of the insurance contract at that date and the fulfillment cash flows measured at that date; and
 - ii. determine interest expense in profit or loss, and the related amount of other comprehensive income accumulated in equity, by estimating the discount rate at the date of initial recognition using the method in the simplified approach proposed in paragraphs C6(c) and (d) of the 2013 ED.
- b. for each period presented for which there are contracts that were measured in accordance with the

simplified approach or the fair value approach, an entity should disclose the information proposed in paragraph C8 of the 2013 ED (i.e., the disclosures for contracts for which retrospective application is impracticable) separately for:

- i. contracts measured using the simplified approach; and
- ii. contracts measured using the fair value approach."

Using a fair value approach was considered a last resort by the board and it is unclear how often it's actually expected to be used. Determining a fair value for a contract in the absence of an active market and without an actual transaction could be very subjective.

NOVEMBER MEETING

The IASB held an education session on Nov. 19, 2014 in which it considered a paper prepared by the European Insurance CFO Forum setting out its proposals for accounting for contracts with participating features.

The presentation by the CFO Forum can be found on the IASB's website at the following link:

http://www.ifrs.org/Meetings/MeetingDocs/IASB/2014/ November/AP02-Insurance-Contracts.pdf

The paper itself begins on page 22. The paper lays out a detailed proposal, the general principles of which are:

- "Applicable to all participating contracts ensuring consistent treatment of economically similar contracts.
- In our opinion, provide for a single measurement basis for all types of contracts, with a single discount rate applied for liability measurement and consistency in the treatment of options and guarantees with all other cash flows.
- Full unlocking of the CSM for all assumption changes that impact expected future profits, including financial assumptions which are impacted by the change in value of underlying assets and reinvestment assumptions. The CSM represents

all expected future profits from the provision of services in the contract.

- CSM is released to profit or loss in a way that best reflects the transfer of services under the contract.
- Current portfolio book yield used to determine interest expense in profit or loss to provide consistency in the reporting of interest expense and interest income.
- The insurer elects to present the effect of changes in the discount rate in OCI or profit or loss as an accounting policy choice which is needed to reflect the insurer's asset liability management strategies and as a result of the accounting policy for the assets."

The paper then states that in the opinion of the preparers:

"The key principles of the Alternative Proposal interconnect and taken together as an integrated package provides an accounting basis which reflects the economic substance of participating contracts. The proposal addresses industry concerns whilst retaining the IASB building block principles and providing transparent reporting and disclosure of the financial position and performance of the insurer. The Alternative Proposal ties back to the IASB's existing framework and provides transparency through the current fulfillment value balance sheet, the measurement of all the options and guarantees and transparent presentation of (changes in) estimated future profits in the CSM.

Under the Alternative Proposal the insurer's financial position and performance would be very transparent to users of financial statements. The current fulfillment value balance sheet reveals the insurer's financial position under current conditions and the CSM shows the future profitability of in-force business on a consistent basis for all contracts; this is more transparent than any other industry. This is highly relevant information for long-term contracts, but only where the CSM is fully unlocked." While the IASB did not act on these proposals, they are clearly considering them seriously. Use of a current portfolio book value discount rate has been proposed previously but not accepted by the board which preferred a discount rate based on the characteristics of the liability. It will be interesting to see if the board accepts this proposal now in the interest of getting industry acceptance of the new standard. It's very likely that some variation of these proposals will be put forward by staff at a meeting early in 2015. This is the only aspect of the new standard, other than transition and a few presentation issues, that has not yet been resolved by the board.

The board did not discuss the insurance contracts project in December.

At the same time that the IFRS discussions are going on, the International Association of Insurance Supervisors is developing an International Capital Standard using a related but different valuation basis for insurance liabilities. That basis would appear to use a current discounted value of future cash flows with no margins as the liability. The discount rates are set by the regulator. These changes to both accounting and capital requirements will make for interesting times for internationally active insurers and remind us again that

Insurance Accounting is too important to be left to the accountants!

ENDNOTES

All quotes are from the IASB's Update for the appropriate month unless otherwise indicated.

Update on Regulatory Developments

By Francis de Regnaucourt



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his is a quarterly update on developments at the National Association of Insurance Commissioners (NAIC), the International Association of Insurance Supervisors (IAIS), and other groups who may get involved in group supervision, with emphasis on those that may be important to members of the Financial Reporting Section.

The Life Actuarial Task Force (LATF) met at the NAIC Fall Meeting in November. I report below on a few items that may be of interest to members of this section.

In November, the Federal Reserve exposed a proposed order on standards to be applied to Systemically Important Financial Institutions (SIFI). The proposed order was limited to General Electric Capital Corporation (GECC), a non-insurer, so the standards for regulating insurers remain an open question. The Board reaffirmed its desire to tailor the standards for each SIFI on an individual basis.

In December, the U.S. Treasury's Financial Stability Oversight Council (FSOC) also issued a paper outlining the basis for its decision to designate MetLife, Inc. a SIFI. The paper gives more insight into FSOC's thinking on insurance risks, and would be excellent reading for anyone seeking to write an ORSA.



On the international side, the IAIS issued a 168-question Consultation Document on Insurance Capital Standards (ICS) for Internationally Active Insurance Groups (IAIG), with responses due in mid-February.

LATF MEETING AT THE NAIC FALL MEETING, WASHINGTON, D.C., NOV. 14 AND 15, 2014

I report here only the highlights of the meeting; complete details are in the minutes produced by the NAIC and available on their website. There was progress on many other ongoing projects, but no notable landmarks were reported.

New Valuation Mortality Table

John Bruins (ACLI) noted a few technical issues still to be resolved, and the Academy task force agreed that more work was needed on all but one of those issues. ACLI had questioned the use of different levels of mortality improvement by underwriting class. The task force defended the differences, stating they are justified by the results of the experience study.

There was discussion of the margin to be built into the CSO table (over the basic experience table). The current proposal is about 14 percent for nonsmokers and 18 percent for smokers, in order to cover about 80 percent of participating companies. The 2001 CSO, by contrast, had a margin of about 15 percent across the board.

The current plan is to have a table for adoption at LATF's 2015 summer Meeting.

Contingent Deferred Annuity (CDA) Subgroup

Tomasz Serbinowski (UT) reported little recent activity on the subgroup's three charges:

- 1. Evaluate whether AG 43 is appropriate for valuing CDA; recommend changes as appropriate.
- 2. Evaluate and recommend ways to exclude CDA from the nonforfeiture regulations.
- 3. Evaluate whether the current blank is appropriate for financial reporting of CDA; recommend changes as appropriate.

Regulation 695 (Synthetic Guaranteed Investment Contracts Model) Modernization

Dick Mattison (Transamerica) and Tina Kennedy (Pacific Mutual) presented a proposal to update the regulation. The need for modernization became clear in 2008 when Treasury rates hit an all-time low and credited spreads widened. Stable Value product results were hard hit, but not because of increases in expected claims. It was because the risk premium reduced the value of the assets considerably, but was not reflected in the liabilities. The resulting large fluctuations to surplus were not related to real business problems. Some states gave interim relief, but a more permanent solution is needed.

The proposal recommends that reserves be discounted at a 50-50 blend of Treasuries and a corporate bond index. The blend reflects the pass-through of spreads to the participating plans. Felix Schirrippa (NJ) expressed support for the proposal, and a desire to think more about how much RBC is appropriate for these products. Others expressed concerns that banks had exited these products because of low risk-adjusted margins. The proposal was exposed.

Stochastic Exclusion Test

John Bruins (ACLI) presented a proposal to eliminate stochastic analysis for blocks of business that are not very interest-rate sensitive. The proposal is to (a) calculate a GPV reserve (using existing Cash Flow Testing models, eliminating the need for a whole new model) on the base scenario and 15 prescribed alternative scenarios, and (b) determine the percentage over the base reserve for the highest of the alternative scenarios. If that percentage is less than 4.5 percent, stochastic calculations would not be required. The idea is that companies demonstrate low interest-sensitivity with a low percentage.

ACLI also asked for a change of percentage from 4.5 percent to 6 percent (he said 8% would actually be needed to avoid false negatives, per Towers Watson's 2012 paper), as well as more time for companies to implement PBR and see results. After some discussion, the proposal was exposed.

VM-22 Working Group—Kansas Field Tests

Mark Birdsall (VM-22 Working Group) made a few observations about the results of using the representative scenario technique in the field tests.

There are two companies in the field tests: Company A has moderate benefits, and company B has "Cadillac" benefits and higher charges. Under the representative scenario technique currently in use by the Working Group, Company A's results are at about 86 percent of CARVM, and less than the cash value floor. Company B, by contrast, is at about 110 percent of CARVM. He concluded that the representative scenario technique is doing a good job of reflecting the relative risks of product design, especially GLIB utilization and in-themoneyness.

REGULATION OF SIFI—FEDERAL RESERVE AND FSOC ACTIONS

On Nov. 25, 2014, the Federal Reserve Board exposed a proposed order' for public comment on the capital standards for GECC, the only current nonbank SIFI that is not an insurance group. The proposed standards are substantially similar to those of similarly sized bank holding companies (BHC), based on the Fed's assessment that GECC's activities are substantially similar to those of large BHCs, and based on GECC's business models, capital structures, risk profiles, and systemic footprints. GECC will be required to meet substantially the same requirements (including stress testing) as a large BHC. The public comment period ends on Feb. 2, 2015.

Notable for insurance groups is that this order applies to GECC only and the Fed made clear its ability and intention "to tailor the enhanced prudential standards among companies on an individual basis, taking into consideration their capital structure, riskiness, complexity, financial activities (including the financial activities of their subsidiaries), size, and any other riskrelated factors."

On Sept. 30, 2014, the Fed had initiated a quantitative impact study (QIS) to evaluate the potential effects

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of revised regulatory capital frameworks on firms substantially engaged in insurance. This may include savings and loan holding companies² as well as the other three nonbank SIFIs. The QIS is in response to the Collins Amendment, which requires that the riskbased capital and leverage requirements be at least as stringent as those applied to insured depository institutions. The Fed believes that bank-like capital standards are not appropriate for insurance companies, and the QIS is designed to be an information-gathering step in the process of developing capital standards that would be appropriate to insurers.

On Dec. 19, 2014, FSOC announced its decision to designate MetLife a SIFI. The decision was accompanied by a 30-page legal paper titled, "Basis for FSOC's Final Determination Regarding MetLife, Inc."³ While the paper is couched in terms of legal support for the determination, it offers discussion and insight into FSOC's thinking on many of the top risk issues for insurers, not just MetLife:

- Funding agreements, GICs, and synthetic GICs;
- Securities lending;
- Captive reinsurers; and
- Variable annuities.

The paper also discusses issues specific to the size and risk footprint of SIFIs, and how disruption at a SIFI can spread to threaten U.S. financial stability:

- Risk transmission: spread of financial losses;
- Critical function and service issues; service disruptions to significant clients; and
- Resolvability: how the sheer size and complexity of a SIFI could hinder or help the ability to resolve its estate.

MetLife still has many legal options, so this paper is unlikely to be the last word on the matter. It does, however, provide a thoughtful and thorough analysis of the thorniest risk issues in the industry. As risk managers prepare for ORSA requirements, this paper is highly recommended reading for its thorough discussion of the most material risk issues.

IAIS CONSULTATION DOCUMENT ON ICS

On Nov. 6, 2014, the Financial Stability Board (FSB) of the G-20 announced that the ICS would replace the Basic Capital Requirements, the previous measure of required capital adequacy. On Dec. 17, 2014, IAIS issued a consultation document as the first step in establishing the ICS; responses are due in mid-February. The second step is field testing, which is expected to happen during 2015. The goal is to finalize the ICS by the end of 2016, with a view to adopting them as part of ComFrame, by the end of 2018.

The consultation document poses 168 questions to respondents along the following broad lines:

- 1. Fundamental issues of ICS appropriateness, comparability, and integration of risks across sectors.
- Margins over Current Estimate (MOCE) requirements.
- 3. Market-adjusted valuation approach, especially for long-term business.
- 4. Yield curve for discounting insurance liabilities.
- 5. GAAP with adjustments valuation approach.
- 6. Definition and classification of qualifying capital resources.
- 7. Tier 1 capital resources.
- 8. Tier 1 instruments.
- 9. Tier 2 capital resources.
- 10. Non-controlling interests and deductions form tier 1 resources.
- 11. Capital composition limits.
- 12. Should capital be prescribed? Should there be a backstop?
- 13. Risks not included or not quantified.
- 14. Choice of risk measure and practical solutions for tails.

- 15. Appropriateness of a one-year risk time horizon.
- 16. Field testing.
- 17. Recognition of risk mitigation.
- 18. Participating policies and profit sharing.
- 19. Dependencies of risks, relationships, diversification.
- 20. Look-through approach options.
- 21. Grouping of risks.
- 22. Stress vs. factors approaches for risk measurement.
- 23. Sub-risks for mortality and longevity.
- 24. Segmentation and granularity for each of the risk categories.
- 25. Morbidity and disability risks.
- 26. Lapse and mass lapse.
- 27. Expense risk.
- 28. Premium risk.
- 29. Claims reserves risk.
- 30. Catastrophe risk.
- 31. Stress scenario definition.
- 32. Market risk.
- 33. Interest rate risk.
- 34. Equity risk, including volatility risk.
- 35. Equity type bucketing issues.
- 36. Specific examples of equity bucketing.
- 37. Real estate risk.
- 38. Currency/FX risk.
- 39. Asset concentration risk.
- 40. Credit risk.
- 41. Operational risk.
- 42. Use of variance/covariance matrix.
- 43. Use of variations in method.
- 44. Internal models.

The document also has five appendices (the first three are on 2014 field testing):

- 1. Market valuation approaches for field testing.
- 2. Rationale for the approaches.
- 3. Field testing results.
- 4. Other considerations for selecting methodology auditability, cost, etc.
- 5. Definition of insurance line of business segments.

This very high level summary does little justice to the entire paper, which can be downloaded as a PDF from http://www.iaisweb.org/News/Consultations/Risk-based-Global-Insurance-Capital-Standard-1220. One has to be (a) impressed by the IAIS's thoroughness in setting out these questions, and (b) somewhat awed by the amount of work it will take to reach consensus on a set of ICS that can apply worldwide.

ENDNOTES

- ¹ The full text of the Fed's press release and proposed order can be found at: http://www.federalreserve.gov/newsevents/ press/bcreg/bcreg20141125b1.pdf.
- ² The list of savings and loan holding companies supervised by the Fed as of June 30, 2014 included several large insurers, including: State Farm, TIAA-CREF, Modern Woodmen of America, and New Jersey Manufacturers. The full list can be found at: http://www.newyorkfed.org/aboutthefed/SLHCList. pdf.
- ³ Available at: http://www.treasury.gov/initiatives/fsoc/ designations/Documents/MetLife%20Public%20Basis.pdf.

PBA Corner

By Karen Rudolph

The views expressed in this article are those of the author and do not necessarily reflect the views of Milliman nor are they intended as methods of regulatory or tax compliance.



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UPDATE ON STATE ADOPTION STATUS OF PRINCIPLE-BASED RESERVES

s of year-end 2014, 18 states adopted the Standard Valuation Law revised to require principle-based reserve (PBR) valuations. These states include: Ariz., Conn., Fla., Hawaii, Ind., Iowa, La., Maine, Miss., Neb., N.H., N.M., Ohio, Okla., R.I., Tenn., Va., and W.Va. Total premium contributed by these 18 states, based on 2008 annual statement data, is 28 percent. This implies a gap of 24 states and 47 percent of premium in achieving an operative date for the Valuation Manual. Nine other states (Wash., Texas, N.J., Mo., Mont., Mich., Ill, Ga., and Del.) have advanced the legislation through various stages of approval. These nine states represent approximately 25 percent of premium. Should the nine states with bills in-progress complete the adoption during 2015 sessions, the gap narrows to 15 states and 22 percent of premium.

PRELIMINARY PBR VIA ACTUARIAL GUIDELINE 48

In Dec. 2014, the NAIC Executive Committee and Plenary approved the adoption of Actuarial Guideline 48 (AG 48) as an interim measure to more uniformly regulate captive and special purpose reinsurers until more permanent revisions can be made and adopted to Model 785, Credit For Reinsurance Model Law. The Guideline establishes an expectation of the type and amount of assets to be held on a basis of funds withheld. Trust or modified coinsurance for policies considered Covered Policies. Covered Policies are defined as those required to be valued under Sections 6 or 7 of the NAIC Valuation of Life Insurance Policies Model Regulation (Model 830) and that have risk ceded to an assuming insurer. Covered Policies do not include policies issued prior to Jan. 1, 2015 and ceded as part of an arrangement, as of Dec. 31, 2014, that would not qualify for exemption. Refer to AG 48 for specific exemptions and grandfathering provisions.

Early implementation of PBR was first introduced by Section 8D of Actuarial Guideline 38, which requires calculation of a modified version of the Deterministic Reserve in certain situations. AG 48 further advances this early implementation by defining the amount of assets to be held in support of Covered Policies. The language of AG 48 calls this amount of assets the Required Level of Primary Security, the calculation of which is based directly on VM-20 methodology. The one exception to the methodology is the omission of exclusion tests. AG 48 requires the opining actuary to issue a qualified opinion in either of the following situations:

- i. Funds consisting of Primary Security in an amount at least at great as the Required Level of Primary Security are not held by or on behalf of the ceding insurer, as security under the reinsurance contract within the meaning of Section 3 of Model 785, on a funds withheld, Trust, or modified coinsurance basis, unless the ceding insurer complies with one of the Remediation Options, or
- ii. Funds consisting of Other Security in an amount at least equal to any portion of the statutory reserves as to which Primary Security is not held, pursuant to subsection (i) above, are not held by or on behalf of the ceding insurer as security under the reinsurance arrangement within the meaning of Section 3 of Model 785, unless the ceding insurer complies with one of the Remediation Options.

The reader should consult with the Guideline for specific requirements regarding affiliated companies, specific exemption definitions, the definitions of Primary Security and Other Security, Remediation Options, and the required actuarial analysis.

Reinsurance arrangements structured to include Covered Policies issued beginning Jan. 1, 2015 and later will be expected to hold Primary Assets where the level is determined using the Actuarial Method. AG 48 defines the Actuarial Method for term insurance as the greater of the Deterministic Reserve or the applicable percentage of the Net Premium Reserve (NPR) where the percentages come from a table provided in the Guideline. The Actuarial Method for universal life insurance with secondary guarantee provisions (ULSG) is the greater of the Deterministic Reserve, the Stochastic Reserve and the applicable percentage of the NPR. There is a different percentage table for ULSG than for Term.

Up to this point, companies using reserve financing mechanisms relied on a definition of Economic Reserves that was typically specified in the reinsurance agreement. The economic reserve assumptions were known up front—sometimes locked in at issue, sometimes variable. Companies wishing to continue using reserve financing mechanisms for policies in scope of AG 48 will encounter challenges in planning for these agreements that may be new to them. Three of these challenges are outlined below. The focus is on the Deterministic Reserve for purposes of this discussion, but similar concepts apply as well to the Stochastic Reserve if the Covered Policies are ULSG.

1. *Projecting the Actuarial Method amount into future years*: The Deterministic Reserve as defined by VM-20 is based on a reserve method where assumptions reflect anticipated experience assumptions plus margins for adverse deviation and estimation error, i.e., prudent estimates. At each future point of calculation, or node, the calculation of the Deterministic Reserve should be performed for the population of policies expected to reach that node, taking into account the required margins. This requires a systematic way to produce the future population of policies according to the company's best estimate assumptions, while determining the Deterministic Reserve amounts using prudent estimate assumptions. Generating and auditing these amounts requires a robust actuarial projection capability.

2. Projecting the discount rates for future amounts: VM-20 requires that the Deterministic Reserve be calculated assuming the liability cash flows are discounted using the net asset earnings rate from the segment of assets supporting the policies being valued. This is a straightforward determination at the valuation date, when current interest rates are known; the deterministic scenario is known; and the in-force asset portfolio, spreads and default charges are known. Projecting these considerations into the future involves several moving pieces that are dependent upon one another. For example, in calculating the Actuarial Method amount five years from the reinsurance agreement effective date, what should be the discount rate used? This will depend on the state of the U.S. Treasury rates on that date, the asset spreads and prescribed default charges in VM-20 on that date, and the actual securities in force on that date. All these elements will combine, together with the liability cash flows projected from the fifth year forward, to determine the net asset earned rate which becomes the discount rate.

3. Tax implications: Though not a component of VM-20, tax implications and therefore tax reserves may be a component of reserve financing agreements. During development of PBR, it has been assumed that the Net Premium Reserve (NPR) will serve as the taxdeductible reserve. At present, this is the best assumption that can be made. The NPR is a formulaic piece of PBR and depends on a stated mortality table and valuation interest rate. Currently, VM-20 identifies the 2001 CSO complement of mortality tables as the basis for NPR calculations. A newer CSO valuation table is under development and is expected to be the table used when companies begin to perform principle-based valuations. However, prior to the actual VM-20 operative date and availability of the new mortality table, AG 48 requires NPR calculations for purposes of determining the Actuarial Method amount. AG 48 allows a modified NPR, such that the modification is a percentage (less than 100 percent) of the otherwise-calculated NPR amount using the 2001 CSO mortality rates. The percentages are different for term insurance and ULSG, and are an attempt to estimate the NPR under the new, but not yet available, Commissioners Standard Ordinary table. Outcomes will vary by product and policy year, but there may be more tax-inefficiency in reinsurance agreements in scope of AG 48 than those effective prior to AG 48.

The considerations discussed above are not unique to AG 48. Companies writing business for which a VM-20 modeled reserve component is a factor will need to tackle these issues in the context of business planning and product development purposes.

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