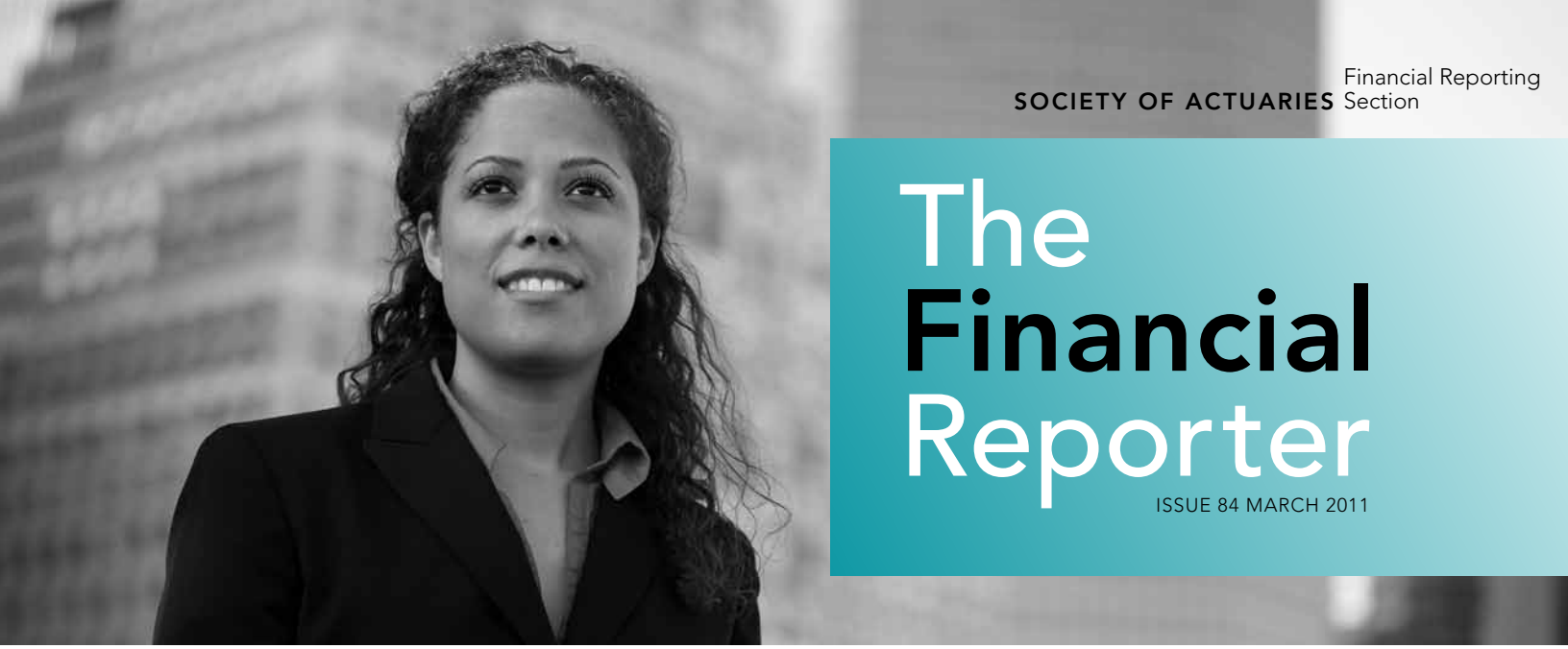

SOCIETY OF ACTUARIES Financial Reporting Section

The Financial Reporter

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Unbundling Derivatives and Other Policy Components in Transitional IFRS

By Doug Robbins

It can often seem, in financial accounting, that just when the industry has implemented a new accounting pronouncement, along comes another to replace or alter it! It could certainly feel that way regarding accounting for embedded derivatives, and other unbundled items on our balance sheets. Many companies may be just starting to feel, in particular, that their FAS 133 and FAS 157 methodologies are finally running as a well-oiled machine. Then along comes possible convergence with International Financial Reporting Standards (IFRS) to make us at least reconsider many of our positions.

Many believe that quite soon, the transitional IFRS period will be upon us. A lot of our accounting concepts will have to be at least rethought, if not in all cases reworked. This article will consider how that might impact the variable annuity (VA) industry in particular, during that transition (although it will touch on other products). Final IFRS (Insurance Contracts, Phase II) will, of course, bring a new challenge for a new day, which this article will not address.

The bulk of this article will assume that liabilities discussed are insurance contracts. This means that under interim IFRS guidelines (IFRS 4), once recognized as insurance, they are handled using current accounting treatment (assumed to be US GAAP, for this article). A liability adequacy test is also required at this interim stage, but we will assume for our discussions herein that this is already met.

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Actuaries
Risk is Opportunity.®

The **Financial** Reporter
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This newsletter is free to section members. Current-year issues are available from the communications department. Back issues of section newsletters have been placed in the SOA library and on the SOA Web site *(www.soa.org)*.

CHAIRPERSON'S CORNER

A PROUD TRADITION

Each year at the Society's Annual Meeting, the Financial Reporting Section Council continues a proud tradition of announcing the appointment of its new Chairperson. Some of you may not be aware that this tradition includes the new Chairperson being presented with a one-size-fits-all, lime-green, polyester jacket, which he or she is expected to wear for the remainder of the Annual Meeting. You have never felt as utterly visible as when you're wearing this jacket. When presented with this jacket, I tried to close my eyes and imagine that I had just won the Masters, but it was no use. This jacket is the color that Elton John wears when he's feeling eccentric.

But—as is the case with many things in life—when you look a little deeper you find something more meaningful. This jacket has been passed down through the Section Council, year after year and from Chairperson to Chairperson. Along the way each Chairperson has signed the inside lining. After pausing a few seconds to allow my eyes to adjust from the glow of electric neon, I looked at some of the names and began to appreciate the impressive company in which I find myself. Among the signatures lining the inside of the jacket were the names of many actuarial icons.

Slightly more interesting was the myriad of stains scattered among the signatures. While trying to connect the names to the stains, it occurred to me how appropriate this tradition really is. Each Chairperson has signed the green jacket—and what a great metaphor that is for the mark that each has left on the Financial Reporting Section, the Society of Actuaries, and the actuarial profession at large. It humbles and inspires me as I begin my tenure leading the Financial Reporting Section Council, and I hope that it inspires you to get involved as well.

INITIATIVES

Building on the foundation laid down by my predecessors, some of the initiatives we undertake this year will be familiar. Continuing Education and Research are two of the main responsibilities of the Section Council, and we will continue to strive to enhance both the quantity and the quality of our offerings in those areas.

The efforts of the Section Council and its volunteers have gone a long way toward expanding the types of continuing education opportunities we are able to provide. Specifically, the last two years have witnessed a targeted effort to increase the number and frequency of webcasts we make available to our members.

At the behest of Steve Malerich, and under the direction of Rob Frasca, we formed a webcast team last year to coordinate, develop and produce webcasts on a variety of topics and on a regular basis. By the end of the year, five webcasts had been completed—a significant achievement for the Section and its volunteers.

In the coming year, we need to further the momentum we have built in this regard and continue to keep a full log of webcasts in the development and production pipeline. Our members are critical to this initiative, and I urge any readers who are willing to assist these efforts to contact the Section Council and find out how you can help.

While we continue enhancing the opportunities for education via webcasts, I want to remind our members of the valuable networking opportunities that are afforded by attending the various conferences. Part of the reason for expanding the use of webcasts for continuing education was due to the need for companies to tighten expenses around conference attendance. As economic conditions improve and companies begin to loosen these restrictions, I hope to see more of you at the Life and Annuity Symposium, the Valuation Actuary Symposium and the Annual Meeting, to name a few. Remember that while you can get the continuing education credits you need by attending a webcast, there's no substitute for getting out there and meeting your fellow practitioners at a Society event.

In addition to the continued progress on webcasts, which will now be coordinated by John Roeger and Dan Harris, the Section will seek to continue to remain focused on defining and executing research projects for the benefit of our members. The research team will be led by council members Mark Alberts and Mark Yu. As is always the case, if you would like to contribute your time as a volunteer, or your ideas for research topics, please don't hesitate to contact those mentioned above, or anyone on the Section Council.

Finally, as an underlying theme to the research and education initiatives, we will continue to expand the focus of the Section to include international financial reporting issues. With the IASB and the FASB both having released for comment new standards for financial reporting of insurance contracts, now is the time for U.S. actuaries to not only get up to speed on recent developments, but to take an active role in shaping these standards.

In addition, there has been a growing demand from our membership to increase our focus on Canadian reporting standards, and the ways the International Financial Reporting Standards may impact Canadian companies and products. The Section Council wants to be responsive to our members, and will continue to seek ways to expand our continuing education and research initiatives to cover these important topics.

LEAVING YOUR MARK

To have the good fortune to serve in this role and share the green jacket with so many bright, dedicated actuaries is a great honor for me, and I thank my predecessors for setting the example for me to follow. Following the efforts of Steve Malerich will be a challenge and I will do my best to fill his shoes.

It sounds a bit cliché, and this point is made year after year, in issue after issue of *The Financial Reporter,* but the work of the Financial Reporting Section is not done by the Section Council alone. We rely on so many volunteers to give their time for the good of the Section. And it is the volunteers—those who present at conferences and on webcasts, who write articles for this newsletter, who serve on the research committee or in other ways—who make the important work of the section happen.

In the tradition of the leaders before me who have signed the green jacket, let me say that I intend to write my name in big, bold letters. Don't miss the opportunity to contribute and leave your own mark on the profession as well. ■

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EMBEDDED DERIVATIVE TREATMENT

One issue that appeared to have been largely settled under US GAAP is which accounting treatment to apply to benefits that accrue solely financial (as opposed to insurance) risk to the insurance company. In addition to guarantees contained in equity-indexed life and annuities, I include here all separate account guarantees on variable products.

Benefits thus described all contain optionality, but not all are considered embedded derivatives. However, the rationale for why or why not has by now been laid out. Even in cases (such as Guaranteed Lifetime Withdrawal Benefits, or GLWBs) where not all parties agree on the treatment, each company has, for the most part, settled and documented positions on why they do what they do.

The advent of IFRS could muddy, or altogether change, these positions.

Definitional Differences

At first glance, the terms derivative and embedded derivative are defined similarly under IFRS and US GAAP. In particular, the concept of an "embedded derivative" according to IAS 39, paragraph 10, does not seem much different from that in FAS 133. Experts on affected products are generally familiar with this term and definition, and it would seem that it will not change a great deal as we move to IFRS.

Ironically, the definition of the simpler term "derivative" is the thing that might possibly change how we do things in the future. The US GAAP definition of "derivative" has three key components, and one of them is a requirement that the overall contract be "net settled." This means that the instrument can be "readily settled by means outside the contract" (among other implications—see FAS 133 paragraph 9 for more detail on this). IFRS requires only that a derivative be "settled." In other words, means of settling the contract outcome "within the contract" would not appear to be ruled out.

In many cases, this wording difference would be immaterial. But one clear case where it at least *might not*, is in a benefit such as a VA Guaranteed Minimum Income Benefit, or GMIB. Under US GAAP, a GMIB, because it requires purchase of an immediate annuity to exercise the guarantee, is not considered to be "net settle-able." Thus, on that basis alone, it is generally excluded from treatment as an embedded derivative. However, under IFRS, that distinction does not exist. A similar benefit could qualify as an embedded derivative.

What would happen next, though, takes us into our next category of classifications.

Embedded Derivative Differences

To the extent that a benefit we are all familiar with is an embedded derivative, it is still quite possible that it would be handled differently under IFRS and US GAAP. *If* a contract benefit *qualifies* as an embedded derivative, US GAAP transitions to just instruct us on how to bifurcate and value the benefit. There is no middle step.

However, under IFRS, there is a very important such middle step. Under both US GAAP and IFRS, bifurcation of an embedded derivative from an *investment* contract occurs if three general conditions are met:

- The economic characteristics and risks of the embedded derivative are not closely related to those of the host contract. (In US GAAP, that's "clearly and closely related," but many feel that this is not a material distinction.)
- A separate instrument with the terms of the embedded derivative would be defined as a derivative under IAS 39 (or "FAS 133" for GAAP).
- The hybrid (combined) instrument is not already measured at fair value with changes in fair value recognized in profit or loss ("net income" in GAAP terms).

However, IFRS 4, in its paragraphs 7–8, imposes two additional conditions for bifurcation from an *insurance* contract:

- The guarantee in question is not the standard surrender value guarantee, and
- The derivative itself is not an insurance contract.

The reader, may, at this point, be inclined to simply nod and assume that they are already well acquainted with

what is and isn't an insurance contract. Not so fast!

In the case of even a modest Guaranteed Minimum Death Benefit (GMDB), the mortality element makes it appear clear to most practitioners that the benefit is insurance. Likewise for the GMIB discussed above. Thus for those benefits, bifurcation would not be required from a host insurance contract. Most VAs are broadly considered insurance contracts, thus bifurcation would not be an issue. (However, it might seem that if a straight investment contract (e.g., a mutual fund?) had a GMIB or GMDB attached, IAS 39 might require bifurcation. That is, unless the whole contract is fair-valued! This can quickly get a bit confusing, and some items may be open to multiple interpretations.)

On the other hand, the wording of IFRS 4 might make us have to think again about benefits that were clearly *not* insurance under US GAAP. The GAAP framework's DIG B8 makes it clear that a Guaranteed Minimum Accumulation Benefit (GMAB) is to be considered a derivative. But the wording in the main paragraphs of IFRS 4, and examples in Appendix B, seem to many to strongly indicate the contrary under IFRS.

"The survival of the annuitant" is actually referenced in some examples as a sufficient contingent event to mandate treatment of a benefit as insurance. For example, the fact that lapsation destroys a benefit would not render it insurance; but that fact that *death* would do so, does! To collect on even the most plain vanilla GMAB, the policyholder must, in fact, survive; which implies a GMAB ought to be considered an insurance derivative.

> … even GMDBs and GMIBs, thought of under US GAAP as "not derivatives," could be derivatives under IFRS.

If even a GMAB could be classified as an insurance derivative under IFRS 4, it might seem to some that any GMWB likewise would—even one that is not for life. Their value surely depends upon survival. This might seem to indicate the need for massive changes over much of the annuity industry's treatment of two staple benefits.

Now, one view about this outcome (and it may be the dominant one as things unfold), would mitigate these apparent changes. That view is, as insurance benefits under IFRS 4, interim accounting treatment for them would revert to US GAAP anyway. Thus, the entire bifurcation and valuation process would remain valid. A possible opposing view, though, would be that insurance treatment is now appropriate. Many companies might well prefer to account for rich living benefits as insurance; IFRS could make it possible.

Is this all complicated enough? No? Well, there is another wrinkle.

Recall that earlier we mentioned that even GMDBs and GMIBs, thought of under US GAAP as "not derivatives," could be derivatives under IFRS. (They would be insurance derivatives, and not bifurcated out—but derivatives, nonetheless.) What if a policy contained both a GMDB and a GMAB that both specify return of premium? Now survival could seem irrelevant! The derivative has value unless lapse occurs, and according to IFRS 4, lapse risk doesn't create "insurance."

One might then conclude that the overall derivative is financial only, and must be bifurcated out and fair valued. And as "not insurance" there would no longer be an IFRS 4 reversion to US GAAP prior practice. At

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least that's another potential view on all this. However, it is well worth noting that such parallel GMAB/GMDB arrangements are common in Canada; and the Canadian view is that since death in that arrangement would affect the *timing* of the payout (and thus at least the present value), insurance treatment is still appropriate. (The combined benefit is there is still an "insurance derivative.")

As you can see, each company will truly have much to consider or re-consider on embedded derivative treatment, as IFRS is initially phased in!

OTHER UNBUNDLING OF INSURANCE CONTRACTS

Interim IFRS does raise some other unbundling issues, although it appears that in typical U.S. industry work, they would not require any changes.

IFRS 4 does not require unbundling service components from insurance contracts (although it may from investment contracts, which will not be covered here). On the other hand, it may require unbundling of deposit components from insurance components, within an insurance contract.

IFRS 4, paragraph 10 states that an insurance contract must be unbundled if:

- It contains a deposit component that can be measured without considering the insurance component, and
- The insurer's accounting policies do not otherwise require it to recognize all obligations and rights arising from the deposit component.

If the first condition is met, but not the second one (i.e., policies already recognize all impacts of the deposit component), then unbundling is allowed but not required.

The obvious U.S. contracts that have a deposit component are deferred annuity and universal life contracts. An argument could certainly be made that traditional life cash values are also such a component. However, general interpretations of US GAAP would seem to already recognize obligations and rights pertaining to those accounts. Thus, IFRS would not seem to require unbundling, although it would certainly be allowed.

FINAL NOTES

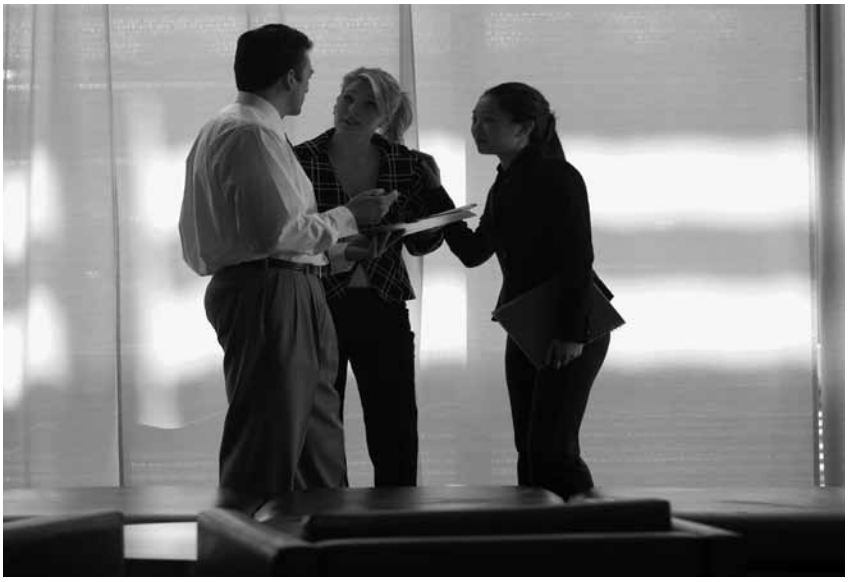
Well, there is some good news. Whether we're discussing unbundling or bifurcation, we eventually arrive, in most cases addressed here, at valuation methods we are familiar with. Insurance contracts, as noted earlier, revert to US GAAP, at least until final IFRS is effective. And to the extent that we do have to value some embedded derivatives as financial instruments, the methodology for doing so will seem quite familiar. In fact, much of the relevant wording in IAS 39 is very similar to that in FAS 133 and FAS 157.

So interim IFRS will definitely give us some things to reconsider, and perhaps change. But the overall scope of the transition may not impose too much additional work! ■

Actuaries and Assumptions

By Jonathan Jacob

This article is a selection from the recent essay contest, "Risk Management Part Two–Systemic Risk, Financial Reform, and Moving Forward from the Financial Crisis." Additional essays are available on the SOA website should readers be interested in reading more submissions to the contest.



The recent financial crisis has highlighted the ability of the actuary to manage risk. After all, professionals in the world of finance were to blame for the crisis by taking on excessive risk through leverage and illiquid assets. As actuaries were busy managing risk profiles for insurance companies and pension plans the investment professionals were piling more risk on and in different formats.

But are actuaries and the actuarial profession truly blameless?

In any model, assumptions are necessary to generate output. Typically, the model is run with varying assumptions to determine how sensitive the output is to the input. But what if the philosophy of generating assumptions is flawed?

Actuarial assumptions are based on historical analysis. Mortality rates used for annuities and for life insurance premium calculation are based on historical death rates, usually with some augmentation for expected longevity improvement which is also based on historical improvements. These rates are obviously different, perhaps accounting in some sense for what financial practitioners would call "bid-offer" but in the actuarial world the term used is adverse selection. There is a greater likelihood a buyer of an annuity will live longer than a buyer of life insurance:

"…set of results acknowledges that annuity purchasers tend to have a mortality experience that differs from that of the general population. Whether this is the result of those who have information that they are likely to be long-lived purchasing annuities, or simply a function of different (and potentially observable) characteristics of annuitants and nonannuitants, is not clear. In any case, because annuitants have longer life expectancies than the broader population, insurance companies have developed a second set of mortality tables."[1]

While this sense of accounting for adverse selection has been well utilized in the realm of mortality, it may be coincidental due to "different characteristics of annuitants and non-annuitants." In fact, one can posit that if historically observable mortality rates for annuitants were higher than those of life insurance buyers the insurance companies would use those higher mortality rates for annuity premium calculations. Leaning on historical observable data for generating assumptions permeates the actuarial world from lapse rates to pension fund discount and return assumptions to models for guaranteed minimum death benefits.

In the investment world, however, the base assumption is maximization of economic utility. In other words, every participant will exploit financial products to maximize its value for him or herself. For example, given the choice of refinancing his or her mortgage, the consumer will account for the cost of the refinancing as well as the rate differential to determine if the decision to refinance is financially optimal. The mortgage

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FOOTNOTES

[1] *J. Brown, O. Mitchell, J. Poterba "Mortality Risk, Inflation Risk and Annuity Products," Working Paper 7812, NBER Working Paper Series, July 2000.*

CONTINUED ON **PAGE 8**

issuer realizes a loss at the time of refinancing as the present value of cash flows is now lower than it was prior to the refinancing. However, the issuer has likely taken two important steps prior to the refinancing. First of all, the mortgage was priced with the value of the option embedded into the price and the value of the option assumes that the consumer will exercise the refinancing option when it is optimal to do so. Second, the issuer has likely hedged the risk of rates declining and the likely refinancing that would occur at that time. This means that in practice the mortgage issuer does not realize a loss when the mortgage refinances; rather, the issuer is actually realizing a gain whenever the consumer does not refinance since optimal refinancing was a pricing assumption.

Over the past 20 years, insurance companies have waded into the capital markets with outright financial products and hybrid products, such as segregated fund guarantees, variable annuities and guaranteed minimum death benefits. Unfortunately, some of these products have cost insurance companies dearly. The assumptions underlying many of these products were generated by historical experience rather than maximizing financial utility, which may have distorted both the pricing and the hedging of these products. Some examples where actuaries can improve assumptions:

- An owner of a policy will not lapse unless the present value of future payments exceeds the present value of expected cash flows;
- Conversely, the policy owner will lapse once the present value of future payments exceeds the present value of expected cash flows;
- An owner of a product with a guarantee who can choose from an array of assets, will always choose the asset with the highest volatility;
- Since a financial product or index has not behaved in a certain way in the past, one cannot assume this will always be the case;
- The best estimate of forward yields can be extracted from the current yield curve.

Implications of this shift in methodology would be significant. Pricing of products would increase significantly and the products would no longer be financially viable to consumers.

Furthermore, the strongest counterargument to adopting this methodology is the fact that consumers do not behave optimally. Products with embedded life contingencies should continue to see suboptimal behavior from consumers with respect to the financial component of the product, since the life contingencies component is the main reason for purchasing the product.

While the above may be true, an investor in life insurance companies would be disappointed to learn that the profitability of the company rests on consumers behaving in a suboptimal fashion. Or an investor in a manufacturer with a relatively significant pension plan may be shocked to learn that actuaries valued the plan assuming a return of 8 percent when the expected return based on the yield curve for fixed income and long-term expectations for the stock market should be closer to 6 percent.

There is no right answer when dealing with assumptions in financial models. However, both actuaries and investment professionals can agree that if the input is inappropriate the output will certainly not add value. If assumptions are based on historical behavior, one can argue that behavior changes over time. The Internet, for example, provides a forum for experts to instantaneously disseminate information to consumers on how to optimally take advantage of insurer products. It should be acknowledged that it may not be appropriate in all areas of practice for actuaries to assume that consumers behave in a way which maximizes their financial utility. But it is time for actuaries to learn from investment professionals with respect to the assumptions used in models. ■

PBA Corner

By Karen Rudolph

In this issue, I discuss nuances involved in the determination of minimum reserve under VM-20 requirements and cover current developments on C-3 Phase III. My comments in relation to VM-20 are based on the Oct. 16, 2010 exposure draft and benefit from recent dialog within the Life PBA Practice Note Work Group, of which I am a part.

MINIMUM RESERVE DETERMINATION IN VM-20

Section 2 of VM-20 defines the company's required minimum reserve amount for policies subject to VM-20. With the introduction of principle-based approaches into the valuation exercise we, as practitioners, will be addressing questions that may be new and different. This article discusses two characteristics of the VM-20 minimum reserve that give rise to such questions.

The first somewhat unique characteristic of the VM-20 minimum reserve is that it is an amount determined in aggregate based on both cash-flow-model-generated amounts and rules-based amounts. The text of the manual reads as follows. For reference, subsection 2.B. is the subsection dealing with the exclusion tests.

> *Except as provided in subsection 2.B., the minimum reserve equals the aggregate net premium reserve for all policies (determined pursuant to Section 3) plus, the excess, if any, of the greater of the aggregate deterministic reserve for all policies (determined pursuant to Section 4) and the stochastic reserve for all policies (determined pursuant to Section 5) over the difference between the aggregate net premium reserve and any deferred premium asset held on account of those policies.*

For purposes of Section 2, the policies that contribute to any of the three aggregate component amounts (net premium, deterministic, stochastic) are all the policies that are subject to VM-20 methods. Other sections of the manual discuss the methods of aggregation allowed in determining the deterministic and stochastic reserve components themselves.

The paragraph above in italics can also be expressed mathematically as in Formula 1 below.

Formula 1

Minimum Reserve = NPR + Max{ 0, (Max(DR, SR) – (NPR - NPRDPA)) }

Where

NPR = sum over all policies of the net premium reserve (Section 3)

NPR^{DPA} = sum over all policies of any deferred premium asset associated with the net premium reserve (Section 3)

DR = deterministic reserve (Section 4)

SR = stochastic reserve (Section 5)

In this formula, the components generated by cash flow models (DR and SR) are by definition determined as of the reporting date whereas the terminal net premium reserve, prescribed by rules, is determined as of the policy anniversary date. In VM-20, the net premium reserve is defined in terms of a terminal reserve under the assumption of an annual net premium. As a result, if a mean reserve valuation method is used on the valuation date, the reserve will need to be adjusted for applicable deferred premium amounts to reflect the amount of net liability appropriate for the reporting date in relation to the policy issue date. The cash flow model components (DR and SR) usually will reflect the periodic and modal nature of premium payments and reflect the reserve as of the reporting date. These components therefore do not usually need a deferred premium offset, though arguably they would if the model did not reflect actual policy premium modes. As a result, in determining the excess over the aggregate net premium reserve, the amounts being compared need to be consistent with respect to the reporting date.

A numerical example of Formula 1 follows, where the policies qualify for the stochastic exclusion test but not the deterministic exclusion test.

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Example
DR = $1,000
NPR = $850
NPRDPA = $50

Minimum Reserve = $850+Max{ 0, ($1,000 – ($850 - $ 50)) } = $850 + ($1,000-$800) = $1,050

Liability: $1,050
Asset: $50
Net Liability: $1,000

Another way of looking at this result is that the larger component, the deterministic reserve, is grossed up by the deferred premium asset amount for purposes of booking to the liability account of the balance sheet. Meanwhile, the net premium reserve component produces a deferred premium for purposes of booking to the asset account of the balance sheet. The net result is the $1,000 deterministic reserve amount. Similar logic applies in the situation where the stochastic reserve is used in place of the deterministic reserve in the example.

If the company's valuation method uses mid-terminal reserves adjusted by unearned premium amounts, then a NPR^{DPA} would not apply, and so would be set to $0. However, the NPR term would need to include the unearned premium liability amount that would provide consistency with the reporting date. If the company's valuation method uses exact reserves, then no adjustments are necessary.

The second unique characteristic of this comparison of rules-based and cash flow model-based amounts is how reinsurance is considered. Sections 4 and 5 of VM-20 define the deterministic and stochastic reserves as being calculated including reinsurance cash flows, and are therefore after reinsurance as they get used in Formula 1. To be consistent, the net premium reserve amounts of NPR and NPR^{DPA} also need to be after reinsurance. Formula 1 produces a minimum reserve that is already net of reinsurance. This is the appropriate presentation for the balance sheet accounts, but the statutory statement exhibits (e.g., exhibit 5) call for pre-reinsurance reserve amounts, with the reinsurance ceded reserve credit listed separately. Section 8 of VM-20 requires the company to calculate this pre-reinsurance-ceded reserve. For the net premium reserve component, this should be done in accordance with SSAP No. 61. For the cash flow model-based components, finding this number involves re-running the analysis ignoring ceded reinsurance cash flows. One complicating requirement is that if the policies qualify for either exclusion test while considering reinsurance, but do not qualify if reinsurance is ignored, then the pre-reinsurance-ceded reserve amounts must be determined based on the required deterministic or stochastic reserves. Another complexity of the pre-reinsurance ceded calculation is the company must use assumptions that represent company experience in the absence of reinsurance, in a manner that is consistent with the manner that retained business is managed (Section 8.D.).

Though the reported reserve is defined in aggregate, the minimum reserve at the policy level is also defined in VM-20. Because the net premium reserve method is a seriatim method, each policy's minimum reserve is equal to the net premium reserve less the policy's portion of any credit for reinsurance ceded. As noted above, this is determined in accordance with SSAP No. 61. If there is an aggregate excess of deterministic or stochastic reserve over net premium reserve, as per Formula 1, a portion of this must be allocated back to each policy. Methods of doing this are yet to be defined.

NAIC RISK-BASED CAPITAL C-3 PHASE III PROPOSAL

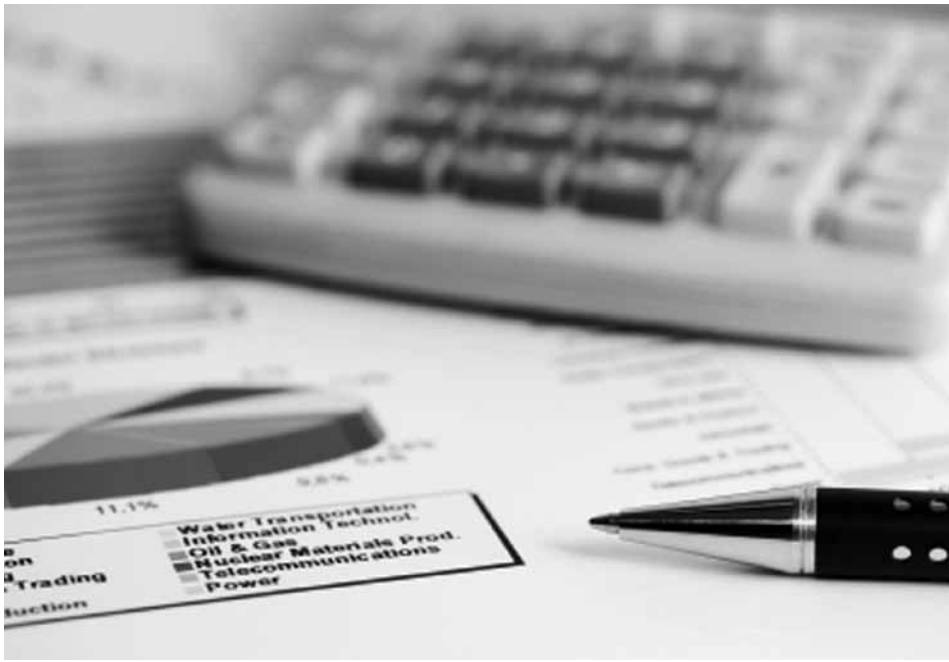
After several exposure versions during 2010, the NAIC's Life Risk-Based Capital Working Group (LRBCWG) is in a position to begin resolving remaining outstanding issues. During a call in early January, the group laid out the steps necessary for considering the C-3 Phase III proposal ready for adoption.

1. A comprehensive issues list in final form will be assembled. It is expected this list will be complete as of January 21.
2. Conduct conference calls during first quarter of 2011 with the objective of resolving these issues.
3. Post a final exposure draft at the Spring National Meeting in late March.

Items that may appear on the issues list include:

- Calculation method: Concern has been raised with respect to the proposed methodology.
- Scope: ACLI has suggested limiting the scope to universal life with secondary guarantees.
- Scenarios: The proposal allows the use of proprietary scenario generators, and the NAIC has yet to express an opinion on this element.
- Scenario reduction techniques: It has been recommended that additional language to allow reduction techniques be added.
- Margins: More guidance in this area is needed.
- Results: ACLI is requesting a feedback loop of some nature to evaluate the method, once operative.

The LRBCWG also recognizes the VM-20 field testing will not become available until March 2011 at the earliest. The findings here may impact C3P3 requirements and the LRBCWG is expected to coordinate with LHATF on those issues affecting both reserves and capital. ■



Uncertainty and Progress

By Henry Siegel

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"A competent lawyer never allows his client to go to trial." — Harold Segall (1918-2010)

Harold was one of my dad's best friends and a well-known corporate attorney. He told me this when I was just graduating from high school and was sure I wanted to be the next Perry Mason and argue lots of cases in court. His point was that the outcome of a trial is always uncertain and competent lawyers protect their clients from uncertainty. He would have made a good CRO.

Harold's comment has come back to me many times as we've been working on the insurance accounting standard, not so much with respect to attorneys but with respect to auditors.

One of the great advantages of a "principle-based" regime should be that it allows you to do what's right and most transparent rather than following a rule that might not work well for the particular circumstance. The difficulty arises, however, when your interpretation of a principle and how to apply it may differ from the opinion of your auditor. So I now think that a competent actuary protects reporting entities from the uncertainty of their auditor's viewpoint.

In the course of the debate over the International Accounting Standards Board's (IASB) Exposure Draft and the Financial Accounting Standards Board's (FASB) Discussion Paper on Insurance Contracts there have been several times where the opportunity for such a disagreement was identified. For instance, the requirement for a "probability weighted" cash flow raised concerns for many commentators that it implied that a stochastic evaluation was required for all reserves. Of course, a multiple stochastic evaluation, where not only interest rates but mortality and lapse rates are measured stochastically, is an extremely complex valuation. Non-life risks, like hurricane or medical malpractice risk, are even more difficult to measure stochastically since there does not appear to be an accepted probability distribution to use.

Then there is also the requirement that the liability take into account "all" possible scenarios. I don't know even a competent actuary who could do that if taken literally.

The standard for when to unbundle an investment component was also subject to dispute over when a crediting rate passes "on to the individual policyholders all investment performance, net of contract fees and assessments." Does that mean that each year the earnings of the year needs to be passed on or is it over a period of time? Do fees and assessments have to be explicit and fixed or can they be set each year? How does one interpret a situation where lower crediting rates support more favorable cost of insurance charges?

In these and other situations, competent actuaries must insist that imprecise language be resolved prior to the standard being issued rather than by discussion with the auditors.

In the course of the final quarter of the year, these and other issues were raised as actuaries, accountants, analysts and others discussed and tried to agree how to improve the exposure draft published by the IASB and the Discussion Paper published by the FASB.

A QUARTER OF SURPRISES

At least for me, this was a three-month period full of surprises. At the beginning of the quarter, it appeared that achieving consensus on a standard would be beyond anyone's best effort. Both Boards were divided almost evenly on every issue and the industry seemed firmly entrenched in a variety of positions. By the end of the quarter, as I write this, it appears that a resolution may be in sight.

It has been clear for some time that there were a limited number of issues on which there was a great difference of opinion in the industry. At the industry roundtables sponsored by the IASB and FASB, those issues were specifically made part of the agenda:

- Topic 1 (40 minutes): Probability-weighted expected cash flows
- Topic 2 (40 minutes): Discount rate
- Topic 3 (20 minutes): Unbundling
- Topic 4 (35 minutes): Composite margin versus risk adjustment and residual margin
- Topic 5 (20 minutes): Modified approach for short duration contracts
- Topic 6 (35 minutes): Presentation

I participated in the FASB sponsored roundtable on December 20 and these were my reactions.

Probability-weighted expected cash flows:
As I noted earlier, part of the discussion of probability-weighted expected cash flows revolved around exactly what was intended. It was generally agreed that stochastic measurements should not be required except for measurement of financial risks such as for embedded derivatives.

At the same time, many of us were concerned that for life insurance the cash flows were too limited as to what was included. In particular, acquisition expenses were limited to only those expenses that were incremental at the policy level. This meant that essentially only commissions and expenses directly related to commissions, like overrides, would be included. This could have an important impact on company results and would potentially give an important advantage to third party distribution systems over tied agency systems.

The consensus of almost everyone at the roundtables was that the expenses needed to be incremental at the portfolio level so they would include expenses like underwriting and policy set up. The recent FASB standard on DAC would have been an acceptable standard. Accounting standards should not create competitive advantages for one distribution system over another.

Discount Rate
Discount rates turned out to be the surprise subject both at the IASB's Insurance Working Group (IWG) Meeting in November and at the roundtables. Both the FASB and IASB had proposed that the discount rate should be the risk-free rate plus something called the adjustment for illiquidity. While many of us had been arguing that this basis had the potential to produce huge volatility in earnings, particularly if bonds were held at amortized cost, as proposed by the IASB in IFRS 9, it was not until November, shortly before the IWG meeting, that major European companies also realized that even if assets were measured at market, relatively small changes in corporate spreads could cause very large earnings volatility if the discount rate didn't vary in parallel. Accordingly, they proposed using a locked-in discount rate based on the yield expected at the time the policy was issued. It was hoped that this would move more consistently with assets measured at amortized cost.

At the same time, the Canadian Accountants also produced a proposal that used different discount rates for the income statement and balance sheet. For the former, they proposed using a discount rate based on the expected earnings of the portfolio supporting the liabilities. For the balance sheet, however, to facilitate comparability among companies, they proposed using a common rate based on some type of index such as the return on corporate AA bonds. This would make the balance sheet consistent for both insurance liabilities and pension liabilities.

It's unclear as I write this what discount basis will prevail except that it's fairly clear that there is little support for the risk-free rate plus the illiquidity adjustment. I hope that a rate based on portfolio yields, either based on book or market values, will prevail depending on how a company measures its assets and runs its business. It appears the FASB and the IASB will incorporate language similar to this in their financial instruments standard as part of deciding when amortized cost can be used for bonds. But there is no guarantee.

Unbundling
The discussion on unbundling is always confusing. The major issue discussed was whether the account value for Universal Life should be unbundled. There was no consensus on this. It was reasonably clear from the drafts that many board members do want the account value unbundled but the principle included in the exposure draft was not clear. A strong point was made that unbundling should only be done if it mattered and it was not at all clear to most people at the table that it would.

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The small size of the risk adjustment led several commentators to suggest that showing it separately made little sense

Composite margin versus risk adjustment and residual margin

This issue benefited most from actuarial input, particularly from the results of the Society of Actuaries' research on the Exposure Draft. That research showed clearly, and to the great surprise of several board members, that the risk adjustment on life products was quite small compared to the residual margin.

There are several reasons for this. The most important ties back to the definition of cash flows. Those cash flows are generally limited to expenses that are specifically related to policy maintenance, not including overhead. Since the residual margin includes the present value of the premium to charge for all those future overhead expenses, however, it tends to be quite large. The residual margin also includes the premium to cover acquisition expenses that are not included in the cash flows which are important under the Exposure Draft definition.

A second reason for the small size of the risk adjustment is that it doesn't include any asset-related risks. For life insurance liabilities, this is the major risk, particularly when measured on a cost of capital basis.[1]

The small size of the risk adjustment led several commentators to suggest that showing it separately made little sense and that it was better suited to a disclosure item. One board member even went so far as to suggest it be shown separately only when material. I suggested that if the boards really wanted a meaningful risk margin, they should include all expenses in the cash flows. If they did that, the remaining margin would be for all risks and would be more meaningful.

Modified approach for short duration contracts

The IASB proposed allowing a modified Unearned Premium Reserve calculation for policies of one year duration or less. There were concerns raised, however, that it was more complicated than the current basis and didn't achieve any greater transparency. Most analysts, in fact, commented that they didn't think the non-life model was broken at all and questioned that any change was needed. Overall, there seemed to be considerable support in the United States and among many analysts for not changing the non-life model even if that meant using a claim reserve with no discounting or risk margin.

Presentation

The IASB proposed a revised presentation basis that did not seem to have overwhelming support. Many participants at the roundtable felt strongly that items such as premiums and incurred claims were important informational items that should continue to be shown on the income statement. Others, however, preferred the proposed basis which gave more understanding of how reserves and risk margins are released. More work will be needed on this. My personal view is that it should be possible to accomplish both through appropriate disclosures.

The IASB is still determined to produce a final standard in June. The industry has resolved to try to reach agreement on discounting as a step toward achieving an acceptable result. Other issues will also need to be resolved if the standard is to have the worldwide support it should have.

The FASB will probably produce an exposure draft at the same time with a goal of a final standard by the end of 2011. This means that the first three months of this year will involve substantial work by all parties to resolve the many outstanding issues in the exposure draft. Hopefully, by April we'll know better where we stand. But if anything, the past quarter has proven once again that …

Insurance accounting is too important to be left to the accountants! ■

FOOTNOTES

[1] *Note that this is generally not the case for non-life claim liabilities.*

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