



SOCIETY OF ACTUARIES

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INSURANCE ACCOUNTING

ON ONE FOOT

**READ ABOUT THE DIFFERENCES BETWEEN THE FASB ED
AND THE ED PUBLISHED NEARLY SIMULTANEOUSLY BY THE
INTERNATIONAL ACCOUNTING STANDARDS BOARD.**

BY HENRY SIEGEL AND WILLIAM HINES



In a famous story, the Rabbi Hillel was asked to explain the law while a heathen stood on one foot. Hillel answered, “Do not do unto others as you would not have them do unto you. The rest is commentary. Now go and study.”

We’ve been asked to do almost the same thing: to take 400+ pages of the exposure draft (ED) of the Financial Accounting Standards Board (FASB) and reduce it to four pages or so in this article. At the same time, we want to explain the differences between the FASB ED and the ED published nearly simultaneously by the International Accounting Standards Board (IASB). So here it is, in our best emulation of Hillel:

Basic Principle: Insurance contract liabilities are the present value of future cash flows (PVFC) of the contract. Everything else is implementation guidance. Now go and study.

In truth, that’s the way it started. It remains that way today in concept. The problem has been to deal with the consequences of applying that basic principle to real policies. The rest of this article deals with some of those challenges.

MARGINS

The first problem that arose when actuaries and other financial analysts started to think about the basic principle is that we realized that using current assumptions to calculate the PVFC would result in all expected future profits on the contract being realized immediately on sale. Many people didn’t like that result since it seems to give credit for coverage not yet provided. So it was agreed that a margin was needed to prevent gains on sale. The IASB eventually called theirs *the contractual service margin* (CSM); the FASB called theirs just *the margin*.

At the same time, the European industry was working on Solvency II, and they had a risk margin in their liability calculations. They therefore pushed to have a risk margin in their IFRS reserves so they could use the same structure. The IASB bought this, changing its name to *risk adjustment* and treating it like a cash flow; the FASB did not. Exhibit 1 compares the IASB and FASB approaches.

So far so good; actuaries could certainly calculate how much margin was needed in total, with or without a risk adjustment. Immediately, however, two more problems arose; how to calculate the risk adjustment and how to release the margin into earnings over time. We don’t have nearly enough time in this article to deal with the first issue; the International Actuarial Association is coming out with a monograph of more than 100 pages on the subject. Suffice it to say, there

are several different possible measurements, and which one is best depends on what type of liability you’re calculating.

Releasing the margin is a simpler problem to answer, if not necessarily to do. According to the FASB, you release the margin as you are released from risk. Some define the risk for a life insurance policy as the net amount at risk, while for a nonlife contract it might be the expected claims pattern over the period. There is no specific guidance in the ED for how to do it.

DISCOUNTING

Taking the present value of future cash flows is a basic technique common to all parts of the financial services industry. Everyone thinks they know how to do it, until it becomes time to actually choose a discount rate.

EXHIBIT 1: BASICS OF THE BUILDING BLOCK APPROACH	
FASB	IASB
SINGLE MARGIN <ul style="list-style-type: none"> Removes any profit at inception Released over coverage and claims-handling period Interest accreted on the margin 	CONTRACTUAL SERVICE MARGIN <ul style="list-style-type: none"> Removes any profit at inception Released over coverage period only Interest accreted on the CSM
	RISK ADJUSTMENT To adjust for the effects of uncertainty about the amount and timing of future cash flow
TIME VALUE OF MONEY Discounted using current rates to reflect the time value of money	
EXPECTED FUTURE CASH FLOWS Explicit, unbiased and probability-weighted estimates of future cash outflows less future cash inflows	



Initially people thought that using a market-consistent set of discount rates (risk-free like U.S. government bonds) was the right set of rates. It was quickly noted, however, that life insurance companies don't price on that basis, nor do they manage their money by buying only government bonds. Using risk-free discount rates would result in possible losses at issue for many products.

Actuaries observed that typical risk-free bonds were more liquid than insurance liabilities and that their interest rates were lower than an instrument with less liquidity. Hence, the liquidity adjustment was born. In their first ED, the IASB suggested using the risk-free rate plus a liquidity adjustment as the discount rate. There are only two problems with this: What is the risk-free rate in a country where the government bond is not risk-free, and how do you determine the liquidity adjustment?

Under pressure from the industry and educational efforts from the actuarial profession, the IASB and FASB then agreed that you could use a top-down approach to determining the discount rate. Essentially you take the yield rates on the assets supporting the liability and reduce those yields for expected and unexpected defaults. In theory, as shown in a paper by the Financial Reporting Committee of the American Academy of Actuaries,¹ this should get you close to the risk-free rate plus liquidity adjustment. The advantage of the top-down approach was that the numbers needed for it were more easily and reliably determined.

Now, in all this discussion, there has always been a major communication problem for some people. When discussing "discount rates" some people heard a single rate as

The New GAAP: IASB/FASB Insurance Contracts Exposure Drafts Webcast Recording

CHECK OUT the recording of this recent webcast, sponsored by the SOA Financial Reporting Section, which features a brief overview of where the boards have landed on these long awaited drafts. Experts Tara Hansen, FSA, MAAA; Leonard Reback, FSA, MAAA; and Henry Siegel, FSA, MAAA, discuss the most debated components of the new frameworks. Although convergence of the two standards appears no longer a possibility, the presenters discuss key areas of difference, as well as the overall potential implications of the new standards. Visit SOA.org/presentationarchives to purchase this and other webcast recordings.

is used in current U.S. GAAP or statutory accounting. What was meant, however, is a complete yield curve. This is important because it introduces major complexity into every calculation. Plus, what do you do if you don't have a yield curve that extends as far as the cash flows you're discounting? The IAA is coming out with a monograph on discounting. Like the one on risk adjustments, it's not short.

EXPENSES

Now, so far we haven't talked about how to estimate future cash flows. This has not really been considered a major concern except for one aspect: What do you do about acquisition expenses?

Initially the assumption was you would treat them like in U.S. GAAP except that rather than setting up a separate asset and amortizing it into earnings, you would simply include them in the estimated contract cash flows, thereby immediately reducing the CSM or margin. The IASB agreed with this; the FASB, however, decided that it didn't want to include acquisition expenses in the cash flows but, instead would reduce the margin when acquisition expenses were

paid—essentially the same result, just a different process.

This was not the end of the differences, however. The IASB did not agree with the FASB's principle, just adopted in ASU 2010-26, that only expenses for successful sales could be deferred. This is an example of creating a difference where one was not necessary and, in fact, would have only a minor effect on earnings.

At the same time, the IASB decided that some overhead should be included in the expenses included in the measurement of the insurance contract, whereas the FASB still uses only direct expenses, excluding overhead. The IASB uses language to describe the includable overhead that seems contradictory:

Fixed and variable overheads (such as the costs of accounting, human resources, information technology and support, building depreciation, rent and maintenance and utilities) that are directly attributable to fulfilling the portfolio that contains the insurance contract and that are allocated to each portfolio of insurance contracts using methods that:



(i) are systematic and rational, and are consistently applied to all costs that have similar characteristics; and

(ii) ensure that the costs included in the cash flows that are used to measure insurance contracts do not exceed the costs incurred.

Exactly which expenses qualify is unclear. “Overheads that are directly attributable” seems to be an oxymoron. Some of the examples, such as rent, might make sense; on the other hand, we have difficulty understanding human resources, for

example. The FASB stuck with the definition in current U.S. GAAP, which would not include these overheads.

PREMIUM ALLOCATION APPROACH

While this building blocks approach seemed appropriate for life contracts, for short-term contracts, like most property and casualty (P&C) and group contracts, it seems unnecessarily complicated. Again at the request of the industry and the actuarial profession, the boards agreed to create a second approach, the premium allocation approach (PAA). Essentially, this is identical to the unearned premium approach currently used in U.S. GAAP.

The IASB considers this an approximation to the basic approach and therefore has made it optional. The FASB, on the other hand, considers it a separate measurement model and has made it mandatory for policies of less than one-year duration.

Whether one can use the PAA for policies of longer than one-year duration is not clear but is likely to be allowed if the policy meets certain requirements (e.g., no prefunding of benefits).

PRESENTATION

All of the above are just preliminaries for the two most confusing aspects of the EDs. Both are technically presentation issues. One affects the splitting of total comprehensive income into net income and other comprehensive income (OCI). The other, in fact, affects only the top line and one of the lines in between.

Other Comprehensive Income

As companies considered what would happen to earnings if these proposals had been in place for the past decade or two, it became clear that there would have been substantial volatility in the bottom line. A large reason for this, of course, was that interest rates moved both up and down. Each time that happened, liabilities would move accordingly. Assets would also move, but if a company was not perfectly matched (and who can perfectly match a 50+ year set of cash flows) assets and liabilities would move differently, creating earnings volatility.

Asset movements, particularly for bonds that are typically categorized as available for sale, would be shown in OCI and therefore be “below the line” and not included in net income. Liabilities did not have such an adjustment. This could cause even greater



volatility in earnings. An OCI adjustment was needed for liabilities.

The industry therefore proposed that for net earnings, the discount rates should be locked in at issue of the contract. This would mean that changes in the liability due to changes in interest rates would not flow through net income, which would therefore be less volatile.

Of course, nothing in this project is that simple. Which effects go into OCI? What do you do with cash flows that are sensitive to interest rates such as lapse rates, interest credits or dividends? The IASB and FASB agreed that only the mathematical effect of changing discount rates would go into OCI, and other effects would go directly into earnings.

They also decided that for policies where cash flows directly depend on interest rates, the locked-in interest rates would be unlocked to the current rates, thereby making the OCI adjustment mostly moot. If this confuses you by now, rest assured it's not you. In fact, this is a great simplification of the topic. You'll need to "go study" to get the rest.

Earned Premium

The second major presentation issue concerns top line revenue. For a long time, insurance companies have shown incurred premium on their top line without adjustment except for premiums due and paid in advance. Many indicators (e.g., loss ratios) have been based on that approach, and users have become used to what is in and what is not. They know, for instance, that they need to look in disclosures to see how much of the premium is single premium and how much is new business premium versus renewal premium. These

are simple adjustments and produce usable information. The only exception to this approach was for universal life-type policies under U.S. GAAP where premium is treated as a deposit and only charges to customers are shown as revenue.

The IASB and the FASB decided that this was misleading because the premiums due for most life insurance policies include amounts that prefunded insurance costs that act like deposits. They reasoned that if banks don't show deposits in their top line, why should insurers? In short, the boards wanted to move all types of policies to a FAS 97 UL-type presentation, whether there was an explicit policyholder account or not, so long as there was a surrender benefit. If a policy doesn't have a surrender benefit, no adjustment for a deposit component is necessary.

Once the premium has been adjusted to remove deposit elements, the remaining premium is further adjusted to recognize

it as benefits are provided. For instance, if you have a whole life policy with level due premiums, premiums are adjusted so that they are recognized as claims, and expenses are expected and margins are released. In saying this, of course, we mean claims without any deposit component (i.e., the net amount at risk). Building up the top line from the bottom, we have the following:

$$\text{Revenue} = \text{Margins Released} + \text{Expected Benefits} + \text{Expected Expenses}$$

This is a simple enough statement. Calculating it will require significant systems adjustments for most preparers.

An example of how this might look is shown in the graph below for a whole life contract. The graph compares premium under current U.S. GAAP using FAS 120 with the new proposals. Note the reduction in total premium and the deferral of premium to later durations.

Comparison of Due Premium and Earned Premium for WL Contract

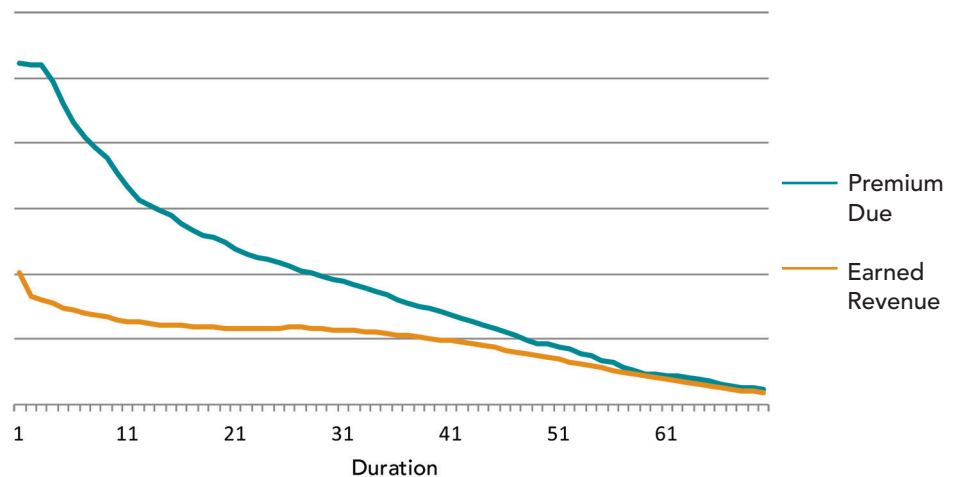




EXHIBIT 2: COMPARISON OF FASB AND IASB POSITIONS

ISSUE	FASB POSITION	IASB POSITION
Assumption changes	Effect of assumption changes goes through income	Effects of assumption changes go through service margin
Margins	One explicit margin	An explicit risk margin and a service margin
Acquisition costs	Only successful costs (same as current GAAP) deferred	All acquisition costs, successful and unsuccessful, deferred
Included expenses	Only direct expenses	Includes certain overheads
Discount rate used for net income	A blended rate can be used for all cash flows	Requires that different discount rates be applied to separate cash flows within a contract depending on their correlation to asset returns

It also is not clear how users will make use of this result. In talking with several, it appears they will ignore it and go to the notes to get the traditional figures.

changing assumptions. The adjusted CSM could be viewed as a measure of the expected remaining profit to be recognized from the contract. The FASB, however, did

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MORE ON MARGINS

There is one more major concern with the margins. What happens if a company changes its assumptions for things other than interest rates? At the urging of the industry, the IASB agreed that the CSM could be used to absorb the effect of such changes and amortize them out over time. This would both eliminate additional sources of volatility in earnings and reduce any temptation to manage earnings by


not agree to unlock the margin so changes in assumption go straight to earnings under their proposal.

As we said in my opening, this is only a brief treatment of the subject. To help understand the differences between the two EDs, both boards included a comparison of their positions in their standards. Of course, they are different! See Exhibit 2 for an abbreviated version.

There are more complications and subtleties in both EDs than there is space for in a short article such as this. To summarize, other than the topics we've dealt with, actuaries most need to be concerned with the cost and complexity of implementing these proposals.

While neither ED is likely to be enacted exactly as proposed, it's nearly certain that both will be implemented eventually with many of the same characteristics. There is a chance FASB will decide not to proceed because of the cost of implementation, but that is unlikely. The IASB almost certainly will proceed because it doesn't have anything in place currently.

As a result of these proposals, actuaries and accountants will have to work even more closely together than previously—which is fine with us because

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

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END NOTE

¹ http://www.actuary.org/files/publications/discount_091509.pdf.