

Comment #14 – 8/29/16 – 7:27 p.m.

August 28, 2016

Dear Actuarial Standards Board and Task Force Members:

Thank you for creating a reasonable and comprehensive organizational framework. The draft standard flows well as a chronicle of a typical pricing exercise, as viewed from a non-market-linked product perspective. Most key elements have been included.

Recommended enhancements in order of importance:

(1) Cash Flow Estimation

Cash Flows - their amounts and timing - are the essence of an insurance transaction.

Cumulative Cash Flow is the quintessential basis whose appropriate level over time is necessary (though not sufficient) for the sustained success of a product. Thus, cumulative cash flow is the most basic profitability metric. Cash Flow accounting is the most basic accounting basis.

Cash Flows are also the foundation for all other profitability metrics. Cash flow estimation is the reason for setting most pricing assumptions and developing a model framework.

Therefore, this standard should highlight the primacy of estimating the amount and timing of contract cash flows.

*One way to incorporate this is to add a new Section 3.1 before the current:

“Estimation of the Amount and Timing of Cash Flows - The foundation of pricing is the estimation of the amount and timing of the cash flows to be generated by the insurance transaction.”

And continue in approximately these words, **“Pricing also includes identifying variability in cash flows and risk of deviation from the expected cash flows, and quantifying the cost of this variation and risk.”**

*Also, in the “Profitability Metrics” section, instead of starting with ROI/IRR, I would start with “The actuary should estimate the cumulative cash flow position at periodic intervals.” If not first, it should at least appear in the list.

* (1) (a) Cash Flows and Cost of Risk – Section 3.5

The subsections in 3.5 are all essential. I recommend adding overall coherence, again referencing cash flows, at the start of the section: **“The actuary should identify the risk factors**

which could result in variability of cash flows or deviation from their expected levels. The actuary should also consider the risk of changes in other factors which impact the profitability metrics, such as accounting bases.”

(2) Consideration of Actuarial and Accounting Laws, Regulations, and Guidelines for Reserves, Non-forfeiture Benefits, Illustrations, Risk-Based Capital, and so on

After cash flow accounting, pricing theory moves to accounting bases such as “statutory” which recognize liabilities. Determination of the policy reserve is a most fundamental, and sometimes time-consuming, task of the pricing actuary. (My first surprise in reading the draft was the absence of reserve mention.)

Valuation regulations are just one area of quintessentially actuarial regulations, laws, and standards that the pricing actuary must understand and reflect in the model, and I think that these actuarially-involved areas should be noted beyond the broad section 3.1.e. language, “the actuary should consider taking into account... applicable law.”

The standard should note “including but not limited to” examples of the types of laws, regulations, guidelines, and standards which most often form a focus of the pricing actuary, such as those relating to non-forfeiture benefits and contract provisions, illustrations, reserves, capital requirements, and accounting.

The task force might even consider adding an appendix which lists, with “including but not limited to at the publication date” language, some law and standard-setting bodies and/or regimes of laws and regulations that the pricing process should reflect (e.g., NAIC Model Laws and state versions, Actuarial Guidelines from the NAIC Accounting Practices and Procedures Manual, Risk-Based Capital Requirements, the Interstate Compact, FASB, IASB). Although there will be changes and additions over time, the benefit of a starting point list could outweigh that imperfection in these increasingly complex times. And maybe a more frequently updated illustrative appendix would be reasonably easy.

(3) Consultation with The Company’s Other Actuaries

The standard appropriately notes in 3.4.3 that “The actuary should consider consulting subject matter experts when setting pricing assumptions in areas outside the actuary’s area of expertise.”

I suggest an additional explicit invitation to consult with the other actuaries who have responsibility for the impact of the product under consideration, in order to ensure the product pricing appropriately reflects, complies with, or can be accommodated in their responsibilities. I am not as fluent with the process as you, but I tentatively had in mind the Illustration Actuary and the Appointed Actuary and/or Valuation Actuary, and the actuaries who handle ERM and/or ORSA.

This could be placed in the section on initial considerations.

(4) Pricing for C-1, C-2, C-3, and C-4 Risks

The standard would be enhanced as a pricing actuary's checklist for completeness by adding the following in the Cost of Risk section:

"Risks to be considered include, but are not limited to, those enumerated in the risk-based capital framework of C1 through C4 risks." Perhaps this ties the standard too much to a quasi-legal construct, yet those terms have become standard actuarial parlance. Alternatively, this could be added in an appendix.

(5) Less Comprehensive Issues

- a. Profitability Metrics --Consider mentioning appropriate choice of a "*discount rate*" in certain profitability metrics, a matter of actuarial (and accounting) study and debate for eons.
- b. "Feedback Loop" in "Considerations ...prior to beginning the pricing exercise" and/or in "Pricing Assumptions" The Scope includes product design. Presumably, the actuary starts with a tentative design, assesses profitability and risk, and then modifies the design. This of course could change the product competitiveness and sales levels, the persistency assumed, expense levels, etc. I suggest consideration of a sentence noting that re-design requires re-examination of both the initial considerations in 3.1 and the assumptions in 3.4.
- c. Assumption Details
I concur with including the list of examples.
Section 3.4.3 – Instead of "the actuary should consider the following:", say "the actuary should consider assumptions deemed appropriate, including but not limited to the following:"
Section 3.4.3.a - Consider adding "prepayments, borrowing cost, liquidity".
Section 3.4.3.c - Consider adding "agent/agency" (I recently read that this is a key predictor of persistency.)
- d. Re-name "Considerations for the Actuary Prior to Beginning the Pricing Exercise". Call it instead "Initial Considerations for the Actuary". This avoids a slight error in logic.

Thank you very much for considering these recommendations. I am available for questions or discussion at your convenience.

Sincerely,

Mary Jo Napoli, MAAA, FSA