Comment #2 – 7/11/16 – 6:37 p.m.

COMMENTS on Pricing of Life Insurance and Annuity Products Exposure Draft

Provided by section as noted:

1.2 It is not entirely clear exactly what limitation the phrase “that will be sold in the future” is intended to imply. Clearly, the ***initial*** pricing of a new product would, obviously, be relevant to a product “that will be sold in the future”. However, products are often routinely repriced or have their pricing reviewed periodically, particularly when, for example, mortality expectations change or to provide for new, changed, or additional underwriting classification structures. Does the scope of this ASOP not apply to that type of pricing work? Perhaps that phrase is unnecessary?

While actuaries may “advise on the design” of the product, is that truly an actuarial ***pricing*** function? The design may certainly affect the pricing by defining the benefit structure and costs but it is not, per se, “pricing”. The wording of 1.2 seems to include product *design* as included in the actuarial services associated with *pricing* whereas it seems to me that *design* is an actuarial service distinctly different from *pricing*.

It seems common to use in ASOPs wording such as is used here: “This standard does not apply to actuaries when performing professional services with respect to illustrations of nonguaranteed charges or benefits subject to ASOP No. 24, *Compliance with the NAIC Life Insurance Illustrations Model Regulation*.” Saying this standard does not apply might seem to indicate that none of the guidance provided within were appropriate when, in fact, it might be. I think I understand why ASOP #24 work is specifically excluded from this draft (as it is for other ASOPs) but, perhaps it would be helpful to provide a reason why this draft standard does not apply work done subject to ASOP #24.

2..3 This section seems to exclude dividends as either an initial charge or as a benefit. In fact, dividend review for participating policies might be considered repricing and seems to be excluded entirely from this process. Also, I might add, there seems no consideration given to products with indeterminate premiums or nonguaranteed elements other than dividends which may need to be changed or updated to keep track with the original pricing assumptions in a changing experience environment.

2.8 I had thought that Stochastic Analysis involved a set of **equally probable** potential outcomes. Would it be helpful to add “equally probable”?

3.1 Here it seems made clear that “intended design” is separate from pricing, as it is a precursor. It does not seem that the adjective “intended” is necessary. Perhaps, this ought to reference the **impact** of the design of the product on pricing. A consideration of “intended” might properly be a function of the actuary advising on the design of the product which, as I noted above, is not, I think, strictly a pricing function.

3.2.1 Why is IRR a “should consider” metric while the others are “may consider” metrics? For some products, term insurance, for example, IRR may be a meaningless measure or less useful than some other. Per ASOP #1 making it a “should” guidance may imply that lack of an IRR measure would be a deviation from this proposed standard. But, in addition, “should” modifies “consider” making its use less clear or definitive as to meaning. Wouldn’t it be better to indicate that pricing actuaries ought to use measures, say, such as the following … and itemize them, as ***appropriate*** and suggest guidance that profit metrics used ought to be ***consistent*** with those metrics used for the pricing of other products similar in nature – or some better worded phrase?

Subsection 3.2.1 (e) does reference “other appropriate measures”.

Maybe some words used need a definition: average return on equity; profit margin (I assume this is a % of premium or revenue measure); embedded value; time horizon; perhaps others.

It seems one cannot clearly reference a “time horizon” for the pricing model and then a shorter period without discussing an appropriate length for the “time horizon”. There does seem to be a definition in 3.3. However, it seems “time horizon” cannot be adequately defined without some reference to the fact that, depending upon the product design and appropriate assumptions, a “time horizon” will be affected by the whether or not a substantial impact on the pricing result would result from adding years to the “time horizon”. This may, vaguely, be covered by the definition provided.

3.2.2 It seems that here would be a good place to add consideration of consistency with other products. I don’t understand how the “pattern of profits over time” affect the selection of a metric. That may, however, affect the design or the time horizon.

3.3(e) Does this “accounting bases” reference mean statutory vs. GAAP pricing models, for example. Or, perhaps value added modeling?

3.3(g) I am not sure how this guidance on taxes would be applied. Is a marginal tax rate of, say, 35% appropriate? There is no mention of marginal taxes. Perhaps the meaning is in the meaning of “tax mechanics”. Maybe that term needs a definition.

3.3(i) Risk mitigation seems to imply deviations from what otherwise might be assumed. Therefore, should it be required that the effect of risk mitigation be documented?

3.3(j) Model Validation – when referencing that the model be "sufficiently transparent" shouldn't there be some reference to whom? One can assume, perhaps, that it is "sufficiently transparent" to the pricing actuary.

3.4.4 The actuary should take into account the design of the product when determining whether to use market consistent assumptions or real world assumptions <u>in</u> performing **stochastic analysis.**

Shouldn't the underlined word be "when" or "if"? Otherwise this might seem to require stochastic modeling.

3.5 "Cost of Risk" seems to need a definition. This gets into the concept of what I have often called a "profit and risk charge" often simply called profit. That is, there are underlying risks in the assumptions: mortality, lapse, interest, etc. which have a cost that can be measured assuming the assumption is actually realized. And there is also the risk that the values chosen for the assumptions may be wrong. That is what, it seems, is meant by "Cost of Risk".

Shouldn't there be more discussion of "Cost of Risk" as a component of a profit and risk charge or is the "profitability metric" merely intended as a "profit" charge. Or, might the level of such a profitability metric be set so as to include an implicit charge for what is called here "Cost of Risk"? I find this introduction of "Cost of Risk" in this way confusing.

3.5.1 etc The term "correlated assumptions" needs a definition or, perhaps, there is another concept that needs to be considered when considering margins. That is, one adds "margin" by choosing assumptions more conservative (relative to effect on profitability) than what otherwise might be used – for example, higher mortality for life pricing. Perhaps, the wording used by the term "in aggregate" is intended to address the possibility that some margins may offset and cancel each other out – to some extent.

3.6 Pricing Controls – sometimes direct writers may rely on pricing done by a reinsurer willing to assume substantially all risk. How does that fit in with this control section?

4.2 Again here the discussion involves "profitability metrics" and "cost of risk" separately. These two concepts need a better linkage.

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