ASOP Exposure Draft: Setting Assumptions

Addressing the seven specific questions posed with the Exposure Draft.

- 1. In some circumstances, the setting of assumptions is largely inseparable from the selection of methodology (Section 1.2).
 - a. I think the concluding phrase, "in such situations", at the end of the first paragraph is more confusing than helpful, and recommend it be deleted.
 - b. Should Section 1.2 more clearly identify what it means by the selection of methodology? Does it refer to the methodology of the work product in which the assumptions are to be used, or to the methodology for deriving the assumptions to be used in the work product? For examples:
 - In some situations, the methodology for the work product could refer to stochastic modeling vs deterministic modeling, where one may be more closely tied to the median of a set of data while the other may be more closely tied to the mean.
 - ii. In other situations, the methodology for deriving the assumptions could determine how it ought to be used in modeling. For example unless they are otherwise adjusted, if morbidity costs are derived using active life exposure alone and not total exposure (methodology of derivation of assumptions), they ought to be applied to a model that applies them to active lives only.
 - iii. In some situations the methodology may include a projection out forty or fifty years though the product liabilities could extend seventy or eighty years.

Perhaps the first paragraph of Section 1.2 could read as follows.

- "Except as provided below, this standard applies to the setting of assumptions in all practice areas. In some circumstances, the setting of assumptions is largely inseparable from the selection of methodology. Therefore this standard should be understood to include an appropriate selection of the methodology such that the work product methodology corresponds to the methodology for deriving the assumptions."
- c. Does "methodology" include the sufficiency of the methodology? For example, a model that projects forty to fifty years may not be sufficient to address a product with exposure for seventy or eighty years. Should the sufficiency of the model parameters be addressed in 3.1.3a?
- 2. Does the ASOP provide appropriate guidance across all practice areas?
 - a. I wonder whether the ASOP adequately addresses policies with very long projection periods. Is Section 3.2 sufficiently strong to recognize that multiple assumptions 30 to 70 years from now may significantly alter the outlook? I think the statement could be stronger to indicate that testing of alternate sets of assumptions may be appropriate where multiple assumptions are part of the projection. For example, when the liabilities of an expense reimbursement LTCI policy, particularly those with automatic increases to the daily maximum, are projected under a variety of economic (interest) scenarios, is the inflation of expenses also adjusted?
 - b. Perhaps 3.2 could include another sentence or two, such as

"Reasonable correlations among assumptions should be considered when analyzing sensitivity, and testing the sensitivity to the correlation assumption itself may be appropriate. Furthermore, the actuary should consider whether the sensitivity analysis is sufficient for the length of the projection period needed for the work product."

3. Conflicts with practice-specific ASOPs?

- a. I think that any conflicts with other ASOPs should be documented just as conflicts with applicable law are to be documented.
- b. I also think reading would be easier to follow if these two types of conflicts were separated into their own paragraphs under section 1.2.
- c. The third paragraph of 1.2 could read as follows (additions are *italicized*).

 "To the extent guidance in this standard may conflict with practice area or activity specific ASOP's that *also* provide guidance on setting assumptions, those other ASOPs will govern. The actuary should document the conflict in the actuarial communication (please see Section 4.2.c)."
- d. The fourth paragraph of 1.2 could then read as follows (additions are *italicized*).

 "If a conflict exists between this standard and applicable law (statutes, regulations, and other legally binding authority), the actuary should comply with applicable law. The actuary should document the conflict in the actuarial communication (please see Section 4.2.c.)"

4. Additional definitions?

- a. I don't think additional definitions are needed unless "methodology" should be defined based on the comments under question 1 above.
- 5. Reasonable results as well as reasonable assumption (Section 3.1.3b)?
 - a. Sometimes it is hard to identify whether a conclusion is reasonable in the aggregate, perhaps principally when the projection period is long. I think a reference to 3.2 would be helpful.
 - b. An additional paragraph could be inserted at the end of Section 3.1.3b as follows. "When the reasonability of a set of assumptions is difficult to assess, such as may be the case for multiple assumptions applied over many years, sensitivity analysis may be appropriate (Please see section 3.2)."

6. Sensitivity tests?

a. Please see item 2 above.

7. Clarity of disclosures?

a. I think the disclosures are clear.

My own questions

- Should 3.1.1 be clarified to reflect multiple entities having the same intended purpose for the work product? For example, the work product may be used to persuade the actuary's employer to approve a premium rate increase as well as to justify the increase to a regulator. Different assumptions may be necessary for each. Perhaps insert "and the intended entities" so that 3.1.1 reads, "The actuary should set assumptions that are reasonable for the intended purpose and the intended entities..., assess whether the assumptions set by others are reasonable for the intended purpose and the intended entities."
- Would it be appropriate to use "best estimate" language and specify when a bias or a suspected bias is added to the assumptions (such as in 3.1.3a.)? Perhaps add something to 3.2, 4.1, or both, to document for the "entity" when reasonably possible, the effect of the biased assumption upon the conclusion of the work product. Also, if adding something to these sections, also reference those sections under 3.1.3a.