Comment #30 – 9/28/13 – 9:02 a.m.

Nationwide Insurance Comments on the Actuarial Standards Board Modeling Exposure Draft

September 28, 2013

Comment 1 (definitions)

The definitions of **Input**, **Parameter**, **Assumption** and **Data** appear to be circular. I noticed this because I was particularly interested in how you would address assumptions embedded in the model code. For example, a modeler may use simplifying methods in code that are valid only if assumed characteristics or behavior of the **organization** or system that is modeled are valid. I think the definition of assumption may need to be expanded beyond input to include implicit assumptions.

Comment 2 (definitions)

I usually think of model limitations as model risk. In the definition, model risk is only a flawed model, inappropriate inputs or misapplication. I am not sure if limitations = flawed. Those are two different things to me. Disclosures of model limitations are called out separately. Perhaps "model limitations" needs to be added to definition section.

Comment 3 (model owner vs modeler)

In general, there is no distinction between the role of the actuary as a model "owner" or "principal", and the role of an actuary operating under instructions from someone else who is the model owner and decision-maker with respect to model design and usage. For example:

3.2.7 e. Documentation—The actuary should document the **assumptions**, **data**, and **parameters** used in the **model**.

What if the actuary is working as part of a team, and gets re-assigned before roll-out? What if the "principal" tells the actuary that we will write the documentation later, but right now we have to get to work on something else right away? I think the standard is fine for the model "owner", but this may be out of the actuary's control.

Comment 4(model owner vs modeler)

3.3.2 Appropriate Governance and Controls—The actuary should use appropriate **model** governance and controls to minimize **model risk**, to maintain the integrity of the **model** and to avoid the introduction or use of unintentional or untested changes.

Similar comment: The actuary's ability to control model governance or model risk may be limited as a member of a project team, as opposed to developing and operating a model as model owner. Maybe "promote the use of" rather than "use", or some other caveat.

Comment 5 (realization documentation)

3.4 Presentation of Results—As indicated in section 3.7.1, the actuary should communicate the results in compliance with ASOP No. 41, *Actuarial Communications*. The actuary should present results of a **realization** of the **model**, explaining methodology, key **assumptions**, possible limitations, and any changes made subsequent to a prior **realization**.

This sounds like every model run requires an actuarial report. This would either become a boilerplate disclaimer which would accompany each model run (and be completely ignored), or it would be a royal pain to do properly. I think this is good for reserve opinions or formal statements of opinion, but I don't think it is suitable for every run of every model. Relying on the general exception based on materiality is OK, but I think the types of model runs that require formal presentation would be a better approach (e.g. model results included in management reports, presentations to management or board, etc.).

Comment 6

A couple of other technical notes. 3.2.5., sections a. and f., refer to "contracts", "plans", "plan sponsors", and "plan participants". I think this language is left over from the life ASOP draft, and could be generalized to be less product-specific. For example, in a., "contract or plan" could be changed to "project".

Comment 7 (general)

My fear was that the actuarial standard would be so rigorous that it would discourage managers from hiring actuaries to build or manage models. In fact, I think the standards are reasonable and sufficiently generalized that compliance should not be onerous, and there are appropriate exceptions based on model importance and usage. Most of the guidance requires actuaries to "consider" options, but there were a few areas in which the ASOP is prescriptive, which could be problematic in particular situations