

Comment #18 – 2/27/15 – 2:43 p.m.

TO: Actuarial Standards Boards (ASB)
FROM: Xiaoyun Ling, FCAS, MAAA, Chubb Group of Insurance Company
SUBJECT: Comments/Questions on Proposed Actuarial Standard of Practice (ASOP) on Modeling

Regarding Section 2.8 Model:

The definition of model seems to embrace a broad range of applications. Can you confirm our understanding that the following are all considered Models, whether they are achieved through traditional spreadsheet or advanced statistical software like SAS, and whether they are deterministic or stochastic?

1. Predictive Models in pricing, underwriting, claims, and marketing.
2. Capital Models
3. Staffing Models
4. Reserving Models

Regarding Section 3.1.1 Applicability of Guidance:

The definition and examples are clear regarding situations when the full application of the guidance is appropriate. However, the examples regarding situations when the full application of the guidance may not be necessary or practical are somewhat confusing. Is the “data validation” and “sensitivity testing” here intended to be “data validation model” and “sensitivity testing model”? Or should we interpret it as such that the parts of modeling process that relate to “data validation” and “sensitivity testing” may not require full application of the guidance, but the parts of the same model that “intended users rely heavily on and has a material financial effect” requires full application of the guidance?

If a model is built for a one-time ad hoc request to achieve a short-term financial benefit (eg, a marketing campaign), would full application of the guidance be required? Contrast this is a model that will be used in an on-going production application. Would these generally always require full application of the guidance?

Regarding Section 3.2.3 Modifying the Model:

Can you further clarify the sentence “when modifying a model to improve the model inputs, formulas, and outputs to meet the project objective”? What if such modifications cause the model to deviate from its intended application? To what extent do we consider such modifications that will not warrant a new model?

Regarding Section 3.2.5(b) Model Structure

In the context of predictive modeling, is it appropriate to interpret that the grouping can be both by rows, e.g. binning, missing imputation and by columns, e.g. principle component analysis?