

Comment #24 – 5/15/19 – 6:00 p.m.

ASOP Modeling – 4th Exposure Draft

Section 1. Purpose Scope, Cross References, and Effective Date

- No Comments

Section 2. Definitions

- Parameter – These feel like a subset of assumptions. I may have assumptions/methods to develop the parameters used in the model. Wondering if that may draw some clarity.
- Testing – Include a Definition
- Validation – Include a Definition
- Limitations – Include a Definition (Someone defined in 3.1.3)
- Model Methodology – Item isn't defined or really mentioned
 - However, it is in the last bullet of Appendix A: “plans for periodic review of the assumptions, parameters, functionality, and methodology.”

Section 3. Analysis of Issues and Recommended Practices

- 3.1.1 – It may not be clear what the Actuary is looking for with “Consistency with the intended purpose” when discussing the volatility of the expected values. That may be more in line with “meeting the intended purpose” in the next bullet (3.1.2)
- 3.1.1 – It's not clear what dependencies are. Is this referencing the dependences amongst models (output from one model as input into another), or consistency of the model with its data, assumptions & parameters (A&P), and methods?
- Defining Dependencies may be helpful.
- 3.1.2 – “output are consistent with the intended purpose.” The word “Consistent is used, but the paragraph starts out with meeting the intended purpose. This may draw confusion on the difference between 3.1.1 and 3.1.2.
- 3.1.2 – Validation – The word is later defined in 3.5.2, however I think the appropriate word should be Testing.
- Validation is a very particular word for many companies and usually corresponds to Independent Model Validation.
- 3.1.3(a) – “Dependencies” is used again and it is unclear what is meant by this, see comments above for 3.1.1
- 3.1.3(b) – “Methods” is used, is this referring to the methods to develop the A&P or Methodology used in the model (similar but slight difference which isn't obvious to the reader)
- 3.1.4(a) – addition of the word “product” to the list of provisions and risks to a...
- 3.1.4(b) – potential to add “whether the form “**or type**” of the model... Model Type seems to be what is later described in section b (Projection, Statistical, Predictive, etc.)
- 3.1.4(c) – This section implies that “model requirements” may be necessary. Key metrics that outline accuracy and precision may be better defined than the example of clustering data. This step is often important in Capital Risk Models and understanding the confidence in the models output which is often deep into the tail.
- 3.1.6(b) – Model Overlay may be better represented here as this is a term used by the FRB in SR 15-18
 - <https://www.federalreserve.gov/supervisionreg/srletters/sr1518a1.pdf>
- 3.5.1 – A, C is specific to Model Controls & Governance and not model testing
 - B is the closest to testing and often described as Sample Testing, however as described this is also a control & governance item
- 3.5.2 – This should be called Model Testing, as commented above, Validation has a specific connotation to many companies that is not meant by what is being described
 - There word “test” is also used in a,b,c, and d can be described as comparative testing
- 3.3 & 4.1 – It would appear that 3.3 a-d should be items that should be disclosed, and it doesn't appear that all pieces are covered
 - B – key methods and A&P may be communicated
 - C – Model testing (sensitivities) may be communicated

Section 4. communications and Disclosures

- No Additional Comments

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