Prescient Models

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In Regards to Proposed Rule 10-17-19 Interagency Policy Statement on Allowances for Credit Losses:

The proposed rule provides helpful comments on how the new Current Expected Credit Loss (CECL) standard should be managed, validated, and monitored. One seemingly simple statement, however, has significant implications.

In the sections "Analyzing and Validating the Overall Measurement of ACLs", "Responsibilities of Management ", and "Examiner Review of ACLs", versions of the following statement are used:

> "…comparing estimates of expected credit losses to actual write-offs in aggregate, and by portfolio, may enable management to assess whether the institution's loss estimation process is sufficiently designed…"

Comparing expected credit losses to actual write-offs seems sensible as a general principle, but unfortunately does not work for CECL. CECL is not a loss forecast. First, CECL is a "lifetime" loss forecast where lifetime is not contractually assured. Since a comparison of CECL estimates to actual losses will generally be for a period that is less than the full life of the loan, the timing of the loss expectation will be critical for such a comparison, and yet many CECL-compliant methods make no attempt to correctly time future losses. Therefore, comparing over any time frame less that the full lifetime can be problematic.

Several points in the CECL guidelines will also cause it to deviate dramatically from future loss experience over any chosen fixed horizon, even when considering only existing loans. Some known examples where CECL will not align with actual loss experience are:

- Defaults after a loan renewal or extension where CECL estimates stop at the extension.
- Reduced losses because of term extensions or loan rewrites.
- Increased utilization of lines of credit or credit card, either normal balance growth by the consumer or in response to a credit line increase, leading to increased losses.
- Consumer activation of inactive accounts leading to increased losses.

The greatest difficulty is in measuring a CECL-compliant historic loss experience given the chosen payment allocation rule for lines of credit. This is an accounting election that dramatically affects model performance and can even lead to changing how the models are created, even though actual losses are not being changed.

To tell developers, managers, examiners, and the board that CECL estimates should be compared to actual write-offs is certain to create a false expectation of what CECL is and how it can be monitored. In each section where this is mentioned, it is the first such item suggested, which will further increase the emphasis among those subject to the rule. Particularly alarming is the idea that examiners will judge a CECL model based upon how closely the CECL estimates align with actuals given all of the above reasons that the CECL estimate will, in fact, never align with actual write-offs regardless of the accuracy of the underlying model, i.e. even a perfect CECL model would fail this test.

The rule should be modified to make clear that CECL will NOT agree with actual write-off experience and can only be compared to a retrospective CECL loss in which actual write-offs have been adjusted for all of the accounting rules present within CECL. This means that the institutions must estimate a historic CECL loss against which to compare the CECL estimates, both of which are different from the actual historic write-offs.

Comparable to this is a historic contribution analysis where past losses are split into components of CECL loss and non-CECL loss, perhaps even splitting the non-CECL loss by some of the causes listed above.

Obviously, both of these approaches are additional work, but they are the only way to perform the recommended comparison. If this is viewed as too difficult for some lenders, then the statements about comparing CECL loss estimates to actual write-offs need to be deleted and left to the kind of detailed model performance review conducted during model validation, not as part of high-level oversight.

As CEO of Prescient Models LLC and Deep Future Analytics LLC, I have already seen this confusion in action. We are a CECL provider to nearly 200 regional banks, community banks, credit unions, and finance companies. We also provide validation services for many in-house CECL models. Prior to CECL, I have worked in credit risk modeling for 27 years and written many articles and books on the subject, including the *Living with CECL* series. During my CECL experiences, clients, validators, and auditors have already demonstrated confusion over the simple point that CECL is an accounting calculation, not a loss forecast.

As a long-time model developer, I sympathize with this confusion, because CECL is the first time in my career where I have needed to create a model to predict a quantity that itself is subject to how I as a developer interpret the CECL guidelines. I hope that in writing rules on model validation and monitoring, the language can be written more carefully to avoid reinforcing this confusion.

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