

# Applying CECL to US Mortgage: A Case Study in Alternatives, Impacts, Accuracy, and Complexity<sup>1</sup>

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## Abstract

The new accounting rules for estimating loan loss reserves offer general guidelines and a list of possibilities, but no specific recommendations for how best to implement those rules. The present study uses a large mortgage dataset from Fannie Mae and Freddie Mac to test a range of models and options. The results quantify the pros and cons of these options using a range of criteria.

By design, the new CECL rules provide a significant amount of flexibility in implementation. As seen from this study, even with a straightforward product like 30-year fixed rate conforming mortgages, the range of models listed in the CECL guidelines can produce a range of lifetime loss numbers that vary by a factor of 2. With the option of discounted cash flows, the range of final answers would vary by more than a factor of 2.

Being able to choose options that will create such different answers will put the burden on lenders not only to choose the most appropriate models for their portfolios, but in doing so to also choose the level of loss via the models chosen, and to defend that choice to validators, auditors, and examiners.

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<sup>1</sup> *This study was sponsored by Allied Solutions, NAFCU – National Association of Federal Credit Unions, and OnApproach. Any opinions expressed here are solely those of the author and may not represent the opinions of the sponsors.*