Why your stress test model will over-predict losses for the COVID-19 Recession

In my upcoming RMA Journal article on the COVID-19 and SARS recessions, I conclude that you can keep using your existing stress test models and focus on getting the economic scenario right. Well, things move fast and I need to add a caveat to that.

Two weeks ago the base economic scenario from our ScenarioAI.com service was a mild COVID-19 recession, reminiscent of the 2001 recession. One week ago it seemed like a half-way-to-2009 recession similar to what the FRB used to publish as their DFAST Adverse scenario was more likely. Now, we're going to release a scenario that is both steeper and deeper than 2009, but not as long lasting. Still, starkly more severe than what we saw two weeks ago.

Stress test models

This has ominous implications for loss forecasts, stress tests, and end-of-first-quarter ("Day 2") CECL estimates for compliant banks. Any method used to create these forecasts will have at its heart a macroeconomic sensitivity model. Using past relationships between macroeconomic factors like GDP, unemployment rate, and disposable personal income, a relationship is found to the probability of default. Such models are never perfect, because most lenders have only a single recession (2009) on which to train, or two recessions if you're lucky.

In our own experience, when we had models built on the 2001 recession and the 2009 recession began, we were correct overall (given the correct macroeconomic scenario), but the models struggled through the peak. Unlike the 2001 recession, the government extended unemployment benefits out to 99 weeks. Our 2001 recession models could not anticipate that or incorporate the implications, so they predicted a sharper, higher peak in defaults rather than the broad, flatter loss peak that occurred.

2020 will not be like 2009

All of the loss forecasting models in the industry today coincidentally incorporate the government policies of 2009. The US government today is contemplating policies that will not significantly improve GDP from what would happen without help. Those policies will probably have only a modest impact on unemployment, depending upon what they choose. Mostly likely will be a large amount of post-job-loss support to support consumers and businesses and lessening the default rate.

Our stress test models will be watching factors like GDP, jobless claims, unemployment rates, and many other ominous-looking factors. We do not yet know what the government will do, but even after they decide, the factors the models are looking at will not incorporate the real impact of those policies. It means that consumers and businesses, hopefully, will not be in as much

trouble as we think. Yes, there will be defaults and bankruptcies. Yes, losses will spike, but probably not as high and the models think, and it will be management's job to make adjustments.

Qualitative adjustments (Q-factors) are still part of CECL, and we expect that CFO's will need to include some negative Q-factors to dial back a little what the loss forecasting models say. There is no obvious precedent for this, so intuition and best guesses will be used to create those adjustments. Auditors and examiners who often hate negative (loss reducing) Q-factors will need to understand why it can make sense this time.

This is not a model failing or a failing of the economic scenarios. Even if both are perfect reflections of past patterns, the current situation is unique and judgment will be required. This judgement extends beyond loss forecasts to new loan pricing and loan yield estimates for investors. The uncertainty is huge right now. Most people know that. But also be wary of the embedded biases in the models because this future will not exactly follow past patterns.