

The Real Value of Stress Testing: Has CCAR Been Validated?

This article was originally published on GARP's Risk Intelligence website on July 12, 2019.

By Tony Hughes

Last year, the US Congress and President Trump [enacted major revisions to the Dodd-Frank Act](#) that dramatically [reduced the scope](#) of stress-testing regulations. Now, with the [Comprehensive Capital Analysis and Review \(CCAR\)/Dodd-Frank Act Stress Test \(DFAST\)](#) season [in full swing](#) for the first time since the changes, it is a good occasion to step back and assess the health of the stress testing firmament.

Randal K. Quarles, the Fed's vice chairman for banking supervision, [recently said](#), "The nation's largest banks are significantly stronger than before the crisis and would be well-positioned to support the economy even after a severe shock."

In some ways, this statement is obviously true. All big banks now hold more capital than they did in 2008, meaning that credit losses must be even more catastrophic before we see any mega failures. For example, according to FDIC data, Bank of America held an 8% common equity tier one (CET1) capital ratio in Q2 2008; today, this figure is comfortably above 12%. Capital buffers, relative to risk-weighted assets, are 50% greater than they were just before the collapse of Lehman.

Quarles seemed to imply that the impact of CCAR exceeds the safety benefits derived from the observed capital increases alone. However, capital could have been increased without CCAR.

Consider a parallel universe where Dodd-Frank never passed, but where its regulators took alternative action to ensure precisely the same capital dynamics as have occurred in this one. Under that scenario, which banks would be considered safer?

CCAR's Impact, and an Alternative Timeline

We can easily point out small victories that are due to CCAR and the stress testing process. For one thing, banks are now better at gathering and maintaining their databases. Modeling the effect of stress scenarios has been an interesting challenge that has introduced new quantitative methods into the banking system, such as the formal modeling of PPNR, which did not really exist before the GreatRecession. What's more, risk officers now talk more with business executives, and questions of existential risk are therefore at least being asked in oak-paneled boardrooms.

Importantly, the current economic expansion has also unfolded without any obvious credit-fueled bubbles occurring in traditional banking products. Whether this would have happened in the absence of CCAR is a debatable point – bankers tend to steer clear of open flames after they have experienced third-degree burns, implying that the current banking moderation may simply be a remnant of 2008 and not a sign that stress tests act as a deterrent to banking excess.

Finally, CCAR deals with foreseeable risks, but banks were probably pretty good at dealing with these before the advent of formal stress testing. It is, after all, the unforeseen risks that get you.

To expand this point, consider an alternative history where CCAR was already in place in 2006. What would the [severely adverse scenario](#) have looked like that year? The Fed at the time was certainly aware that house prices were growing rapidly, and would have tailored the stress test to specifically target over-extended mortgage lenders.

But would they have used a 30%+ national price decline under stress? I remember the fateful period well: housing markets were deemed to be strictly local in nature and a nationwide 10% drop was considered far-fetched. Would mortgage default models, conditioned on a history of ever-increasing home values, have identified the torrent of looming losses? Highly doubtful, even if the then-ludicrous (but ultimately correct) 30% figure had actually been used in the regulatory stress scenario.

One imagines the CCAR risk committee meeting taking place at [Washington Mutual](#) at the time. The moderate loss projections might have even offered a green light to the booming subprime mortgage business, especially since WaMu had a higher CET1 ratio (9.8%) than Bank of America at the time. Indeed, if the [Crapo legislation](#) had already been passed in this alternative timeline, [IndyMac](#) would not have needed to bother conducting a stress test at all.

Unproven Theory

We can be certain that increased capital has improved safety in the system. It's also possible to make a prima facie argument that stress testing has generally improved the practice of risk management.

The theory that banks are now safer because of CCAR, though, has not yet been tested. For CCAR to be definitively identified as the source of safety, we need to observe a deep recession coupled with healthy big banks providing a steady flow of credit despite a shrinking economy. Moreover, we need the analysis conducted prior to the recession to be helpful to managers of the banks in navigating the stormy seas. Declaring victory during a boom, in contrast, seems premature.

Banking crises, thankfully, are rare events; it may be decades before the next crisis. In the meantime, CCAR seasons will come and go and will generally indicate, [as the 2019 vintage did](#), that the big banks are safe and sound. Many will ask why the test is still relevant, whether the expense is justified.

But stress tests aren't really about 2019. They're about the next financial crisis, whenever that may be. I'd prefer to enter that crisis having just conducted a rigorous stress test, if it's all the same to you.

Tony Hughes is a managing director of economic research and credit analytics at Moody's Analytics. His work over the past 15 years has spanned the world of financial risk modeling, from corporate and retail exposures to deposits and revenues. He has also engaged in forecasting of asset prices and general macroeconomic analysis.