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CECL and IFRS 9 Recommendations: Handling Shifting Economic Scenarios

Introduction

With the rapid deterioration in the economic outlook resulting from the COVID-19 pandemic, we provide some clarity on our process for updating forecasts and best practices for incorporating forecast changes in expected credit losses estimation procedures for both CECL and IFRS 9 accounting.

Our standard practice is to produce baseline and alternative economic forecasts on a monthly basis. Our forecast process kicks off with the release of the monthly Employment Situation from the Bureau of Labor Statistics (typically the first Friday of the month). At that point we incorporate all of the latest reported economic and financial data as well as any unmeasured shocks or forthcoming policy changes that have yet to make it into the observed data.

We are committed to continuing this process given how many of our clients have built their processes around our calendar. We released our March baseline forecast on March 10 and alternative scenarios shortly thereafter.

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Addressing shocks

To address shocks to the economy that occurred after the posting of our standard scenarios, we released a series of ad hoc “thematic” series specific to COVID-19. We typically release such scenarios after natural disasters or to assess the risk of potential economic events like a Greek bond default. We released a Severe Pandemic scenario on March 13 and a Critical Pandemic scenario on March 20. Given the continuation of the COVID-19 pandemic and the growing economic fallout, it is highly probable that we will release additional updated scenarios on either a weekly or biweekly basis until the situation stabilizes and ameliorates.

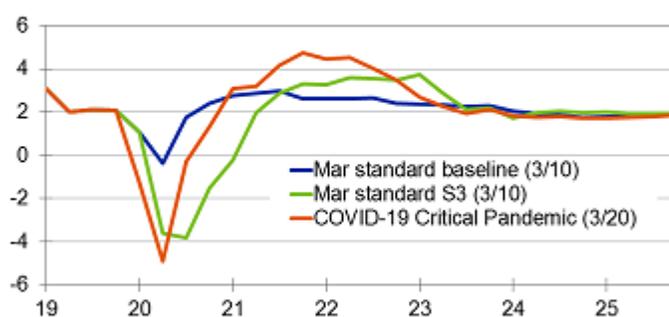
The Critical Pandemic scenario incorporated information about the spread of the virus and economic events through March 19. In addition to assumptions regarding the epidemiology of the virus, we assumed \$1.65 trillion in fiscal stimulus this year (specifically, \$8.3 billion in tranche 1; \$90 billion in tranche 2; \$1.5 trillion in tranche 3; and \$0.6 billion freed up by emergency declaration). We hosted a [webinar](#) on March 20 to explain our latest forecast and guided clients to consider this scenario as our latest baseline view.

While these stimulus assumptions are aggregated up to a macroeconomic level, we note that the stimulus will not be even across industries in either magnitude or impact. In terms of the effect on individual loan portfolios, much depends on specific assumptions about the stimulus. Does it go primarily to support households and small businesses as we have assumed, or will it be used to support the balance sheets of businesses in heavily impacted industries such as cruise ships, airlines hotels and energy companies? CECL filers will want to carefully consider their own portfolio concentrations and stimulus assumptions to justify any positive—or negative—qualitative adjustments to their loss forecasts.

The charts below describe the forecast path for the Critical Pandemic scenario and how it has changed from other scenarios published earlier in the month. While we do call for a sharp decline in output and a rise in unemployment in the short term, the effect of monetary and fiscal stimulus is anticipated to lead to faster growth in 2021. As a result, the impact on modeled lifetime losses is not as large as one might expect, though it does vary considerably by asset class. Short-term consumer or small-business loans are predicted to fail at high rates, but losses on super-prime mortgage portfolios may experience only a modest increase—or even a decline—as low interest rates accelerate refinancing.

Output Contraction Swift and Severe

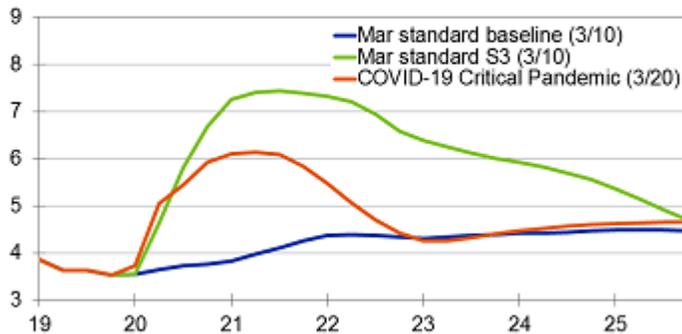
Real GDP, annualized qtr/qtr growth rate, Mar 2020 forecast vintage



Sources: BEA, Moody's Analytics

Unemployment to Spike With Gradual Recovery

Unemployment rate, Mar 2020 forecast vintage



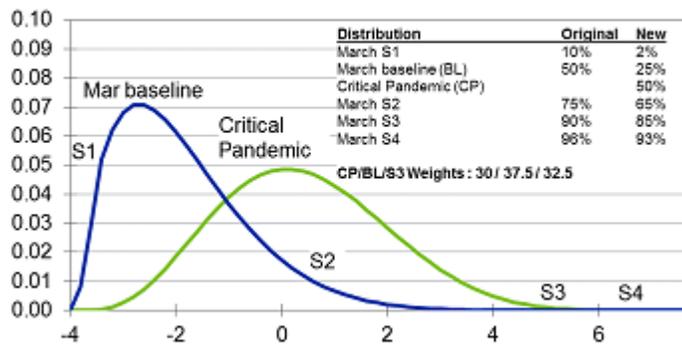
Sources: BEA, Moody's Analytics

Further, we are providing guidance regarding shifts in the distribution of possible economic outcomes. With the downgrading of our baseline forecast, it is logical that the probabilities associated with our standard, alternative scenarios would shift as well. As illustrated in the diagram below, our view is that the Critical Pandemic scenario is centered at the 50th percentile while the previously published March baseline has migrated to the 25th percentile.

Other scenarios have shifted to the left of the distribution as well, though we note that the shift is disproportionately smaller further out in the tails. This is an assumption based on the historically observed pattern of "risk compression." The bounds of the distribution provide one argument for this behavior: Unemployment cannot go outside of the 0% to 100% range. The presence of automatic stabilizers, market forces, and mean reversion behavior are also assumed to slow movement in the tails of the distribution. We reiterate that this is an assumption. Users should consider their own assumptions regarding the shape of the distribution in light of recent events and may justifiably assign either lower or higher percentiles to each of the scenarios.

Scenario Probability Distribution Has Shifted

Distribution of 2-yr cumulative jobs lost (+) or gained (-)



Source: Moody's Analytics

Operationally, CECL and IFRS 9 filers have several choices for incorporating additional scenarios into their loss estimation process. Many of the filers we have surveyed have developed highly controlled processes based on the standard alternative scenarios that Moody's Analytics produces (for example, baseline, S1, S3). Deviating from established processes could create audit issues unless exception procedures are carefully followed.

All filers are intending to incorporate qualitative overlays (that is "Q factors") to account for the high level of uncertainty in the economy overall as well as for particular geographic footprints or industrial exposures. Many filers are running additional scenarios in an ad hoc manner in order to provide supporting analysis for their selected Q factor adjustments. Others—including many IFRS 9 filers—are considering formally running additional scenarios with additional weights attached to them.

For CECL and IFRS 9 filers running multiple scenarios, our current recommendation is to estimate losses given the new Critical Pandemic scenario and reweight loss estimates resulting from other scenarios assuming that the CP scenario is located in the middle of the distribution. While CP represents our latest baseline thinking, there is tremendous uncertainty at this time. Under the CECL guidelines, individual filers need to make their own assessment of what they consider a "reasonable and supportable" distribution of possible outcomes. That may mean putting additional weight on downside scenarios as we learn more in the days and weeks ahead. Alternatively, filers could consider producing their own customized economic scenario(s) using the Moody's Analytics Scenario Studio tool to best represent their own "reasonable and supportable" forecast.

Once users have assigned percentiles to each of the economic scenarios, weights may be calculated based on a midpoint, average or percentile approach. (Details are available in our [white paper](#).) We note that the assignment of weights to discrete scenarios in order to approximate the expectation of a continuous distribution is itself based on a set of assumptions. CECL filers have discretion to deviate from the calculated weights based on their own set of assumptions.

As a clarifying example, we compute the weights under the midpoint approach for the combination of the Critical Pandemic, March baseline and March S3 scenarios based on our assumed percentiles in the diagram above:

$$\text{March baseline wgt} = 25 + (50 - 25) / 2 = 37.5$$

$$\text{March S3 wgt} = 100 - (85 - (85 - 50) / 2) = 32.5$$

$$\text{Critical Pandemic wgt} = 100 - 37.5 - 32.5 = 30$$

We recognize there are operational and/or governance constraints that may limit the ability of some users to quickly implement updated scenarios in their loss estimates. They may have no other option but to reweight the losses calculated based on the standard March scenarios Moody's Analytics published earlier in the month. If the original March BL, S1 and S3 scenarios are used with the new percentile assumptions, the mathematically derived weights would be 41.5, 13.5, 45 based on the midpoint approach. Note that this presumes that the distribution is fairly uniform or normal which is highly unlikely today. Therefore, there is a strong case for users to choose to assign more weight to S3 and less weight on either the BL or S1 scenarios.

A further complication is that updated scenarios may continue to be released before the end of the quarter. Assuming Moody's Analytics releases a more severe baseline scenario on Friday, March 27, the probability distribution will shift further leading to the assignment of new scenario probabilities and weights. Users may want to consider the very latest information Moody's Analytics publishes when finalizing their CECL estimates for the reporting period.

Though downside risks have risen considerably, we caution users not to immediately adopt the darkest conceivable path as their expectation. While considering extreme paths such as 20% unemployment may be prudent for planning and risk management, our understanding is that this is incongruent with the CECL guidance around the computation of expected losses. Users are directed to consider not only the negative effects of the virus but also the partially offsetting impact of fiscal and monetary policy. There will be an opportunity to downgrade loss forecasts in the future as events unfold. We are monitoring the situation day by day and will either issue new scenarios or guidance on shifts in the probabilities as needed in the days and weeks ahead.

Moody's Analytics is committed to providing users of our scenarios with the most up-to-date, highest-quality forecasts available while clearly acknowledging the key assumptions underlying each of them as well as the risks. Our analysts are available to assist users to understand all aspects of each scenario so that they may make fully informed decisions during this time of extreme volatility and uncertainty. While we are prepared to speak to any aspect of our forecasts, we should note that we are economists, not accountants. Any suggestions or guidance provided should not be construed as a recommendation or a professional opinion of financial reporting guidelines. The only indisputable advice we can provide is to check with your auditor before implementing any decisions.

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