

How lenders can adapt estimated credit loss methodologies for CECL

In June 2016, the Financial Accounting Standards Board (FASB) [released its new financial instruments impairment standard](#), which means lending institutions must implement new methodologies for recognizing and reporting credit losses.

This new model eliminates the previous GAAP threshold, which delayed credit loss recognition until it became probable that a loss would incur. Instead, the new FASB requirement replaces the incurred loss model with an expected loss model, known as the current expected credit loss or "CECL" model. According to a survey of banks conducted by Moody's Analytics, more than 62 percent of respondents expect CECL compliance to increase their overall provisions.

Implementing this new financial instruments impairment standard is a long process that can take between 12 months and two years to accomplish.

Accurately measuring expected credit losses not only meets FASB's new standards; it is a crucial part of managing a credit portfolio in an environment with rising compliance costs and narrowing profit margins. Fulfilling CECL requirements means that banks must leverage a rich data set with an appropriate credit loss estimation methodology; examples include:

Information set

- » **Historical Experience:** Credit loss estimation based on historically observed relationship between realized defaults/losses and credit risk drivers such as financial ratios.
- » **Current Conditions:** Current conditions of the borrower, loan, and market.
- » **Forecast Data:** Reasonable and supportable forecasts of the borrower, loan, and market characteristics.

Methodology foundation

- » **Method:** Examining existing loss estimation methods, such as an existing probability of default (PD) or loss given default (LGD) model, and determining whether they must be modified to meet CECL requirements, can serve as a good starting point.
- » **Lifetime loss estimates:** Over contractual terms. Also based on reasonable and supportable forecasts.

In the [CECL Quantification: Commercial & Industrial Portfolios](#) webinar, we discuss the common methodologies for estimating credit losses in C&I lending and how to adapt methodologies to be more forward-looking and compliant with CECL requirements.

Overview of Common ECL Methodologies for C&I

Estimating credit losses (ECL) for C&I lending remains a top priority for banks, as this sector accounts for about 20 percent of all loan activity at banks. We researched historical loss rates using loan level data in Moody's Analytics CRD™ (Credit Research Database) of quarterly portfolio snapshots of C&I loan information from 2000 Q2 to 2015 Q4 and found:

- » 0.6 million unique loans
- » 2.6+ million snapshots
- » Average loan balance is \$934,460
- » Weighted average maturity is 1.8 years
- » Weighted average age is 0.89 years

While various methodologies exist for estimating credit losses, the following are the most common for C&I lending:

Loss Rate Approach – Apply either collective or individual historical loss rate percentages as a cumulative rate or as a loss rate curve, and include average charge-off method, static pool analysis, and vintage analysis.

Rating Migration - Calculate percentages of assets that "migrate" to a more severe risk rating or delinquency status, and apply the migration-rate percentages to the balance in each category to estimate the amount that will migrate to the next category throughout the contractual life of the asset.

Probability of Default/Loss Given Default - Separate default and recovery risk, providing greater insight into the ECL estimate, and apply to other business processes such as loan pricing, limit setting, and risk monitoring. Include BASEL models, granular stress testing models, and internal PD/LGD ratings.

Lenders can use different methodologies to determine each of these factors, and no single industry standard exists for determining which risk drivers to include in credit loss forecasts. Nonetheless, common risk drivers include:

- » Risk ratings or classification*
- » Industry of the borrower*
- » Borrower size (total assets or sales)*
- » Loan size*
- » Availability of financial statements*
- » Loan age
- » Geographical location
- » Collateral type
- » Loan purpose (leasing, working capital, and so on)

- » Origination vintage
- » Effective interest rate
- » Term

**These are most common for C&I lending.*

It is crucial to accurately quantify these risk characteristics in C&I portfolios and to align these methodologies for CECL. As shown in more detail in our webinar, banks can adapt two current methodologies to align them with the new forward-looking CECL requirements.

Adapting Loss Rate Methodology

Adapting historical loss rate methodologies provides one route for banks to comply with CECL. This adaptation would involve adjusting historical loss rates to reflect the impact of expected macroeconomic scenarios. Including macroeconomic trends, such as the local, national, or industry unemployment rate, credit spreads or other data, conditions the lifetime or term structure loss rates to provide more accurate forecasts.

Adapting PD/LGD Methodology

Similarly, the PD/LGD methodologies also provide a means for lenders to calculate estimated credit losses under CECL. The three types of loss estimates in PD/LGD are:

- » Through-the-cycle (TTC)
- » Point-in-time (PIT)
- » Scenario-conditioned

Lenders can adjust the TTC or PIT estimates using current and forward-looking data, such as the local unemployment rate or the credit trend of publicly traded firms in the particular industry to determine the overall market environment. This information allows lenders to see trends that can play a major factor in determining the PD of the loan.

[Click here](#) to learn more about CECL Quantification in C&I Lending.

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