

## Best Practices for Driving Business Value with CECL Compliance

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### ABSTRACT

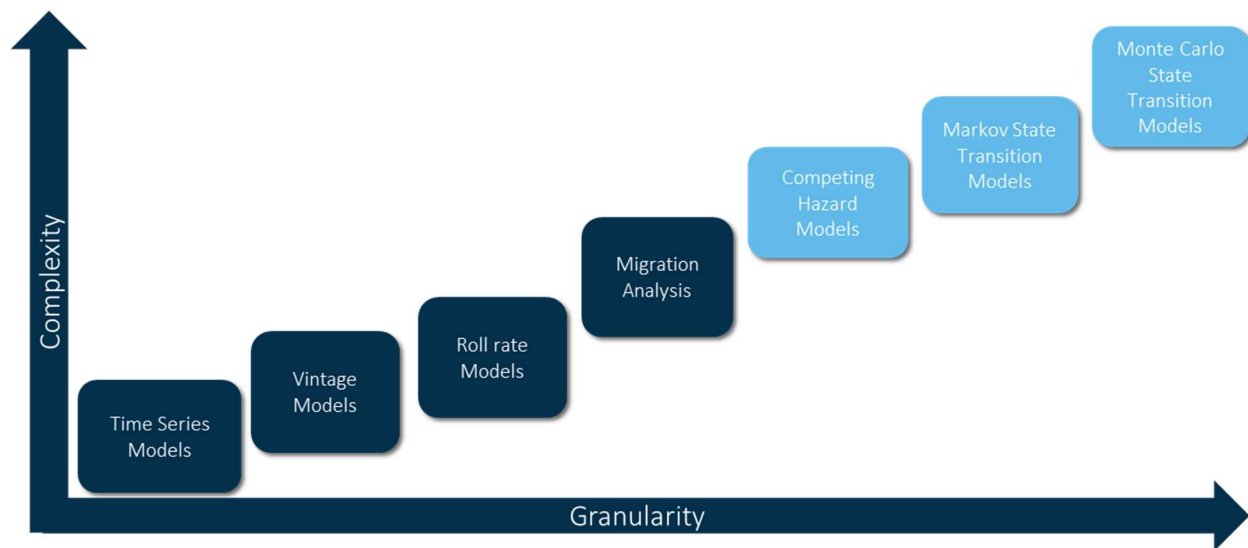
The current expected credit loss (CECL) standard is a big change in credit loss provisioning and an even bigger opportunity to drive value through the Credit Risk function. At the very least you will be able to rationalize your existing credit risk models and pools. Ideally, you should be able to create a risk feedback loop to your product pricing and also be in synch with your liquidity risk projections. Understanding CECL is key to being able to drive the full value of the new requirement. We start with a review of CECL background before digging into methodology considerations. When discussing methodology considerations, we specifically cover segmentation, loan life and loan average life, loss rate options, forecasting, and qualitative adjustments. As we delve into these considerations you will see where the opportunities are to rationalize your existing loan loss process, provide enhanced risk-based pricing information, and share information with the Liquidity Risk function. We also cover how to overcome some of the common challenges in realizing this value, including data quality issues and alignment of resources and processes.

### INTRODUCTION

There are several key differences between CECL and the legacy Allowance for Loan and Lease Losses (ALLL) accounting standard. The first is that, under ALLL, a loss allowance is established only once a loss has become probable. Under CECL, loss allowance will be calculated based on loan characteristics from the date of loan origination. Second, under ALLL, loss allowances are accrued only within 12-month periods. If a loan will continue to underperform past the 12-month horizon, those losses will be booked in the subsequent 12-month periods. Under CECL, the loss allowances are calculated for the lifetime of the loan. Finally, CECL changes the accounting treatment of purchased credits and assets held for sale. This will require new segmentation and modeling for these types of exposures.

These differences are the reasons why CECL compliance requires that banks have the appropriate loan-level detail for loss modeling. CECL represents a fundamental change in how credit risk is assessed. It introduces a significant increase in the complexity and sophistication of loss modeling. There is a broad spectrum of modeling methodologies that can be used for loss estimation, from simple time series models to complex Monte Carlo State Transition models. As modeling methodologies become more sophisticated, the data requirements become more stringent and robust. (See Figure 1 - Model Complexity and Granularity.)

These are the two primary drivers for the cost of CECL compliance: analysts to develop and maintain models, and the data required to support those models. Even though it might be costly, the benefits can far outweigh the costs if CECL compliance is seen as an enterprise effort and not just a risk activity. CECL can drive additional benefit as an enterprise initiative by reducing reporting effort and time, providing enhanced client knowledge, and improving strategic decisions.



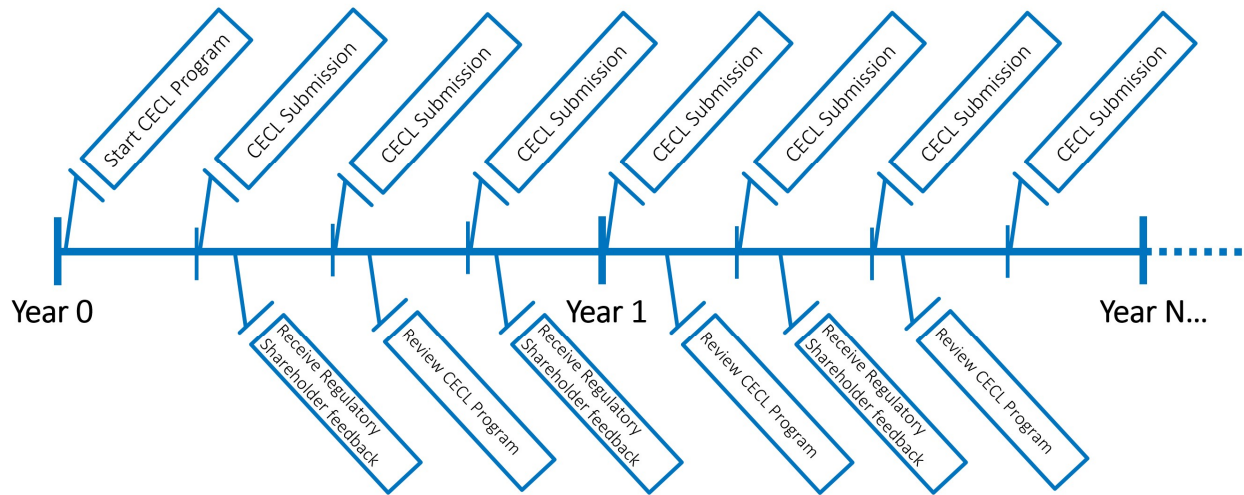
**Figure 1 - Model Complexity and Granularity**

## CECL DATA NEEDS

Data needs increase in three ways. First, the number of data elements required increases. Second, the availability of the historical data points increases. And finally, the need to ensure the recency and accuracy of those data elements increases. For example, to perform a vintage analysis, loans should be pooled according to their origination period. The losses for each subsequent time period should be calculated. These losses aggregate into a cumulative loss rate. Macroeconomic data, such as the unemployment rate, can be used to explain deviations in period losses and can project similar losses into the future. In broad strokes, the data elements required for vintage modeling are Loan ID, Origination Date, Period, Period Principle Balance, Period Charge Off, Period Recoveries, and Period Macroeconomic Variable(s).

Markov State Transition models are more complex than Vintage models. Markov models evaluate the probability for the next state a loan could enter based on the current state and related covariates. For example, what is the probability that a credit card currently not past due will enter 30 days past due within the next quarter given a credit score of 770, a low debt-to-income ratio, low balance, and low account usage. The covariates that can be selected are very broad and can be adapted to the institution, a specific marketplace, and a specific product. Therefore, the data elements needed for a Markov State analysis will be much broader than those needed for a Vintage analysis.

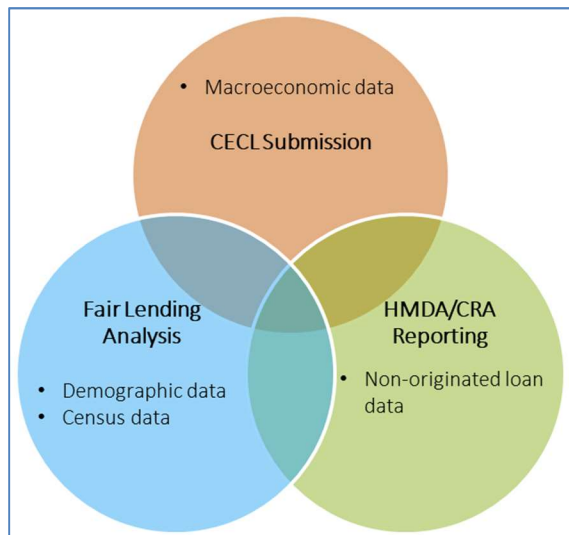
As the CECL regulation matures, modeling standards will continue to increase. Vintage analysis will be acceptable in the onset. However, given time, the expectation will be for more complex and sophisticated credit loss modeling. This will be driven not only by regulators, but also by shareholders. Given the quarterly submission timeline it will be very easy to enter into a vicious cycle of CECL submission → regulatory/shareholder feedback → CECL program revamp → CECL submission. (See Figure 2 - CECL Timeline and Program Cycle.) The CECL mandate represents a great opportunity to be forward looking and use your organization's data assets strategically. In laying a foundation to support the type of modeling that will be required for CECL compliance, you can extend the value of your data to a much broader enterprise framework.



**Figure 2 - CECL Timeline and Program Cycle**

### DRIVING VALUE BEYOND CECL

One of the most easily accessible benefits can be achieved by creating a single data repository for your lending activities. This repository can drive CECL submission, HMDA and CRA reporting, Fair Lending analysis, and a slew of other regulatory reports. Most of the data elements that would be required for any of these activities are shared. (See Figure 3 - Risk and Regulatory Data Overlap.) The primary difference is largely in the segmentation of the data population. For example, HMDA reports on all home mortgage activity whether originated or not while CECL would evaluate only originated and therefore existing exposures. Having a consolidated repository has many benefits. The number of data movements required for reporting purposes can be drastically reduced, which will simplify your reporting process and reduce your time to market for reports. You will also be able to reduce the amount of support and upkeep needed for multiple disparate data sources by having a single enterprise data repository. Finally, you will break down organizational barriers between these reporting functions, granting greater visibility into the reporting process.



**Figure 3 - Risk and Regulatory Data Overlap**

A consolidated enterprise Risk data repository provides a good foundation for householding. The purpose of householding is to have a comprehensive view of the client. Having all of your exposure data in a single repository will make it much easier to link multiple accounts to a single client. This will be very helpful for your loss modeling activities. Knowing if a client is delinquent on a credit card should be valuable input into forecasting whether he or she will also be delinquent on a car loan or a mortgage. Householding is very valuable beyond CECL as well for the potential to identify upsell and cross sell opportunities with your current clients.

You can also derive additional benefit from your CECL submission by creating a feedback loop between Risk and Pricing and Underwriting. By doing this you can realize two benefits. First, you can more competitively price your products. You can have customized offers that more accurately reflect the cost of lending. Second, by linking back to underwriting you can more effectively modify your lending criteria. This will allow you to accept applications that you might have previously rejected and reject applications that you might have previously accepted. The net effect will be loan portfolio growth with reduced risk.

Finally, a feedback loop in place to both Pricing and Underwriting will enhance your strategic decision making by giving a quantitative value to your Risk models and underlying data elements. This will help you assess the value of portfolios you might wish to purchase. On a broader scale it can also be used to assess the value of any proposed mergers and acquisitions.

## CONCLUSION

Although CECL is going to be burdensome and challenging for many institutions, if done well there are many benefits that will more than offset the costs. Institutions can either make the investment to get ahead of the CECL curve or find themselves caught in the CECL vicious cycle. Those that get ahead of the curve will have benefits including reduced reporting time, reduced data ownership cost, increased client knowledge, and enhanced strategic decision-making capabilities.

The work required for getting ahead of the CECL curve might seem insurmountable. However, this can be done in a staged approach. It does not need to be done as a big bang release. You can incrementally add the components discussed above. Laying the right foundation will help prevent extensive amounts of rework while allowing you to continue to drive additional value beyond your CECL submission.

## CONTACT INFORMATION

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