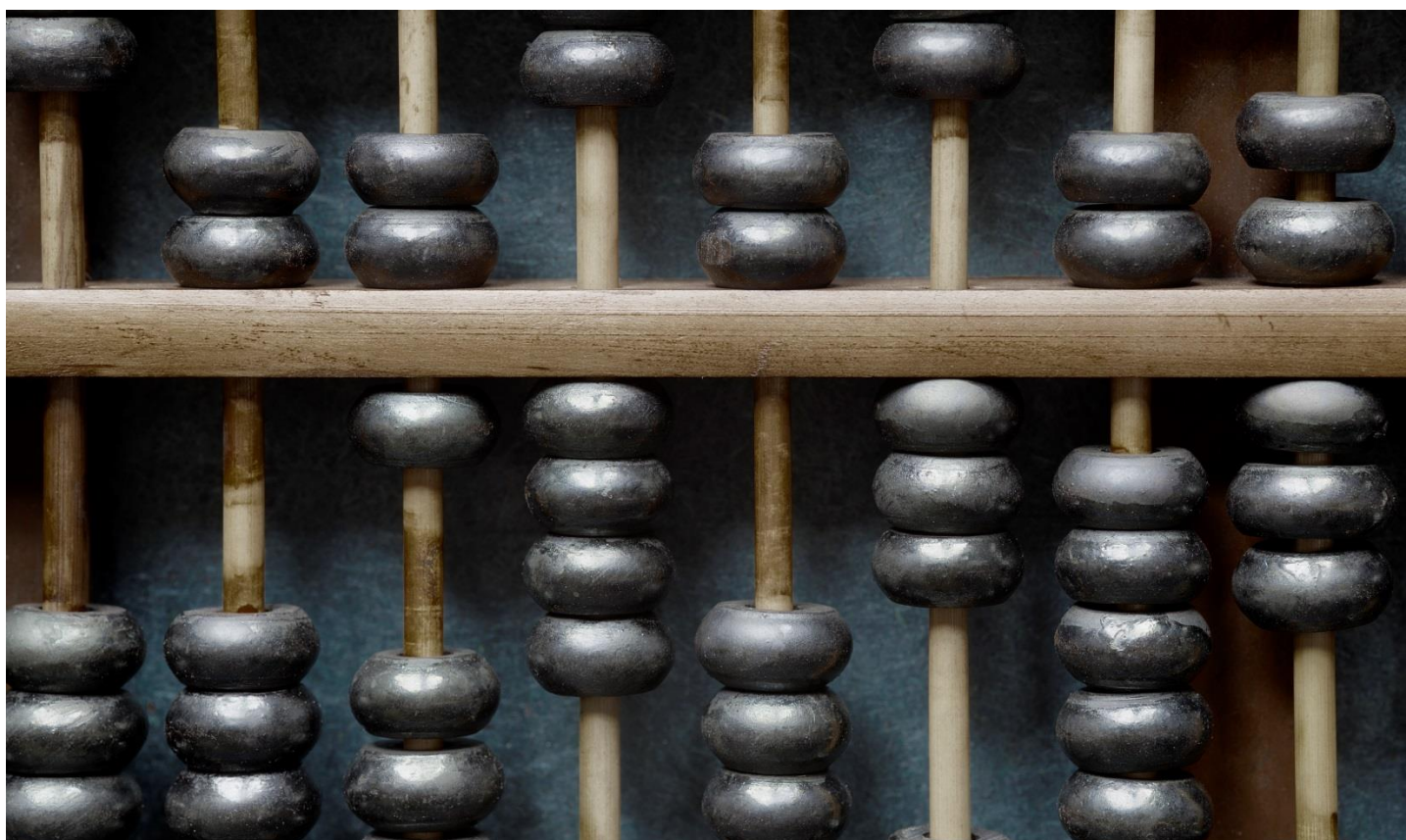


Breaking down CECL

As the Current Expected Credit Loss regime kicks in, how should banks prepare?

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1. Understanding CECL

1.1 What's the buzz about

Current expected credit loss, or CECL, an accounting standard notified by the Financial Accounting Standards Board (FASB) a year ago, is regarded by some regulatory experts as the “biggest change ever to bank accounting”. The model is due to take effect in 2020 for those registered with the US Securities and Exchange Commission (SEC) and in 2021 for non-SEC registrants and non-public business entities.

CECL emerged from the FASB's decision to revisit the allowance for loan and lease losses (ALLL) calculation in the aftermath of the financial crisis and will replace the currently followed impairment model, which is based on incurred losses.

Under the CECL model, banks and financial institutions will be required to measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. The stress is on using forward-looking information to better inform their credit loss estimates.

The shift could result in an increase of 20-60% in allowances for some banks since CECL requires calculation of losses expected to be incurred over the entire lifetime of a loan or credit instrument.

While this seems to have an immediate impact on the capital planning process of the bank, the overall impact of CECL seems to be much more widespread at an organization level. Not only will it require significant changes in the overall accounting standards for the bank, but also, it will create the need for new operational practices and procedures to be followed across the organization. It will also create enhanced disclosure requirements for compliance and audit purposes.

The new accounting model is in fact an alternative to IASB's new IFRS9 standard, and is arguably one of the most discussed terms in banking today, just like the Dodd-Frank Act or the Fundamental Review of Trading Book regulation. Though CECL and IFRS9 are different in many aspects and technicalities, the core concept behind both is the same – calculating expected credit losses instead of 'incurred losses' when estimating ALLL.

1.2 What will change under CECL

In contrast to the incurred loss model which relies on past impairment, CECL has an 'expected loss' bias. This can result in the following key changes:

- Uniform accounting standards to be applied to loans of all credit quality
- Estimation of future losses on debt portfolios
- Accounting for losses at the inception of an instrument
- Special treatment for acquired loans with significant change in credit quality
- Requirement of new disclosures such as credit quality indicators

2. Approaching CECL

2.1: The case for custom-tailoring the approach

The core concept behind CECL is to incorporate forward-looking estimates in expected loss calculation. However, FASB does not recommend any specific approach to generate these estimates. This offers added flexibility to financial institutions, but also presents its own set of challenges.

For one, a generic approach to CECL may be simplistic, and a one-model-fits-all strategy may not be the best thing to apply to financial institutions and banks of all ranks and sizes. A large wall-street investment bank may have a seasoned team of expert professionals with expertise in model development, alongside a scalable IT infrastructure that is further boosted by huge budgets and capital spending available for CECL implementation. On the other hand, a small community bank, with a few hundred million in loan assets, may find it difficult to allocate specific resources for development of loss projection models. Such a bank may prefer to use a simpler approach like a qualitative adjustment to a historical loss rate based on futuristic scenarios.

A third party service provider can also provide some help in data analytics, reporting and model development, saving the banks much time and effort.

2.2: Deep-dive analysis a must, too

The CECL approach ultimately boils down to using a cost-effective and accurate forward-looking analysis to estimate the future losses, which should please both regulators and auditors. There could be different tools, though one may be widely used to make such analysis simpler for banks with large and more complicated portfolio of assets.

2.3: Ingredients of the approach

Regardless of the way a tool is used to estimate the expected credit loss, there are two critical components of such analysis: assumptions and methodology. Any change in either of these two can have a huge bearing on the loss estimated.

2.3.1 Assumptions & data

While data holds the key to any good model or analysis, assumptions about future scenarios play a key role in estimating the ALLL amount. These assumptions and required data may be related to:

- Macro-economic variables such as GDP growth, inflation, unemployment
- Instrument characteristics such as cash flow and correlations
- Credit quality parameters which may vary across instruments and customers

A model is only as accurate as the data underlying it, and the current data may not be sufficient to meet all the requirements of CECL because:

1. Current data might be of a historical nature, while CECL requires future estimates of variables
2. More granular data is required under CECL as losses have to be estimated at a loan/ instrument level
3. Data may be constantly changing

As such, it becomes very important to incorporate reasonable and sound assumptions in the models. A specific problem with assumptions is that they are likely to change, and a small change can have a big impact on the loan loss estimates. For example, a small change in the pre-payment rate can have a significant impact on the credit loss amount estimated for the loan. Also, sometimes the macro situations can change unexpectedly and suddenly, resulting in significant change in the expected loss. A prudent way to tackle that is to consider several scenarios with different probabilities of occurrence. For example, for estimating the loss on a loan portfolio, one may consider an annual default rate of 1% under the best-case scenario, which has a probability of occurrence of 10%; a normal scenario involving a default rate of 2.5% and a probability of occurrence of 80%; and a worst-case scenario with a 10% probability of occurrence where the default rate is 6%. The loss estimates calculated under each of the methods can then be probability-weighted to give the expected credit loss of the loan.

2.3.2 Methodology

There is no rule book on which methodology should be used to calculate CECL and banks have the flexibility to choose any specific method that they deem fit for their portfolios. However, a good method for calculating CECL should have the following attributes:

- **Forward-looking:** The only requirement explicitly stated by the FASB is that any methodology used to estimate credit losses should be forward-looking
- **Understandable:** While more complicated models may become a necessity for some exotics, a simple, easy-to-understand methodology is preferred. As CECL also comes with the criteria of enhanced disclosure requirements, a simplified and well-explained model may be preferred to one that is complex and difficult to explain
- **Robust:** The method adopted should be robust and must be applicable under different situations and scenarios
- **Dynamic:** While assumptions are likely to change frequently, the methodology is not. As such, the methodology adopted must be dynamic to accommodate the changing assumptions and input requirements

As discussed earlier, the exact methodology that a bank selects will depend on the portfolio size and characteristics, as well as the budget and resources allocated. A bank may choose any of the widely used quantitative modelling approaches such as vintage analysis, probability of default or loss given default model, loss migration approach, or it may choose to use a qualitative approach. It is important to note that both quantitative and qualitative approaches are subject to individual discretion.

3. Preparing for the change



3.1: Current-state evaluation of portfolio and processes

1. **Portfolio analysis:** It helps to start early and by analyzing the current portfolios. This would involve separately evaluating the exposure of each of the portfolios and marking the factors that can have a significant impact on the current portfolio.
2. **Studying existing processes:** The next step would be to evaluate the existing models and methodologies, and how they incorporate the factors identified above in loss estimation.
3. **Gap analysis:** This would involve identifying the gap areas between the current processes and methodologies and the forward-looking approach under CECL

3.2: Data collection and analysis

Once the factors affecting the exposure of individual portfolios have been identified, the next step is to collect the data related to these factors. More granular and detailed data will be required to generate loss estimates under CECL. Data quality checks will also be of key consideration.

1. Assessing the quality of existing data
2. Determining the data requirements based on current state analysis
3. Building and maintaining a centralized data repository
4. Building data controls and quality checks for data validation

The following sample represents some key data that might be required under CECL:

A. Macroeconomic

- Real and nominal GDP and their growth rates
- Unemployment rate
- Nominal personal disposable income
- Consumer Price Index and Wholesale Price Index inflation
- Housing Price Index
- Interest rates

B. Loan/bond related

- Loan maturity
- Coupon
- Type of loan (fixed or floating rate)
- Callable features
- Outstanding amount
- Loan-to-value ratio
- Collateral
- Delinquency status

C. Borrower related

- Demographics
- Net income
- Debt service coverage ratio
- Credit quality
- Payment behavior

3.3: Methodology development

The chosen methodology may depend on the portfolio size and characteristics, as well as availability of data.

- The existing models' methodology can be leveraged to develop new models which are CECL-compliant. The gaps highlighted using the first step can help evaluate if new model development is required or existing models can be enhanced to generate CECL-based estimates
- This step may involve interacting with various stakeholders of finance, IT and risk to understand the feasibility of implementing a particular methodology
- A revamping of existing processes surrounding the methodology must be discussed in liaison with the method being discussed. For example, if a particular modelling method is selected, its disclosure requirements must also be evaluated in conjunction. Also, the kind of data required and the data quality controls should be kept in mind

3.4: Implementation

- **IT:** Necessary IT infrastructure must be set up to implement the CECL models and methodologies. The infrastructure should be scalable and robust. In order to do so, a bank should first review existing IT infrastructure and controls to assess current capabilities related to models, data, processes and reports, and assist in the design requirements for data and IT systems to obtain additional information, as required
- **Governance:** A governance framework consisting of stakeholders from various departments of the organization, such as finance, IT, risk, compliance and audit, needs to be established to monitor CECL implementation at the firm level. Banks should also establish or refine processes, controls and operating model for the CECL program. The management must also ensure that policies and procedures are clearly documented and communicated
- **Training and documentation:** Training of bank employees on CECL and the methodology used, as well as documentation of models and the assumptions, are required along with implementation. A bank can start preparing training modules well in advance so that relevant employees are in sync with the regulation.

4. The imperatives

With CECL set to take effect, preparation and assessment have gained urgency. While experts have come out with their own assessments, the exact impact of CECL on the banking industry would only be known with time. All the same, it is important to understand that CECL is aimed at improving long-term liquidity of banks. While there may be some initial roadblocks and challenges in implementation, the regime has been welcomed by the American Bankers Association as a key reform in calculation of expected credit losses. In this context, choosing the correct approach may help minimize the short-term impact and provide long-term benefits.

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