

CECL SCENARIOS
CONSIDERATIONS, DEVELOPMENT, AND
OPPORTUNITIES

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FASB Requirement

“The measurement of expected credit losses is based on relevant information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. An entity must use judgment in determining the relevant information and estimation methods that are appropriate in its circumstances.”¹

This statement from FASB has one overarching sentiment, that forecasts be “reasonable and supportable” related to expected credit losses. The volume of appearances (39) in the document is a good indication of the weight placed on this element.


Providing direction, based on experience, is the purpose of this addendum to FRG’s [original CECL paper](#).

While specific methodologies are not proposed there is little doubt that institutions will need to consider how to adjust historical losses for current conditions. In addition, the historical loss rates will need adjusting for reasonable and supportable forecasts that affect the expected collectability of financial assets.²

Achieving this goal is via the development and modeling of two elements:

- Economic Shocks
- Stress Scenarios

No review of methodology would be complete without an understanding of the application of both quantitative and qualitative aspects. Quantitative historical loss information will generally provide an appropriate starting point for an institution's assessment of expected credit losses. However, the new credit losses standard acknowledges that because historical experience may not fully reflect an institution's expectations about the future, the institution should adjust historical loss information, as necessary, to reflect the current conditions and reasonable and supportable forecasts not already reflected in the historical loss information. Similar to today's practices under the incurred loss methodology, an institution will continue to incorporate qualitative and quantitative factors when estimating allowances for credit losses under CECL.³



FASB REQUIRES FORECASTS TO BE “REASONABLE AND SUPPORTABLE” RELATED TO EXPECTED CREDIT LOSSES.

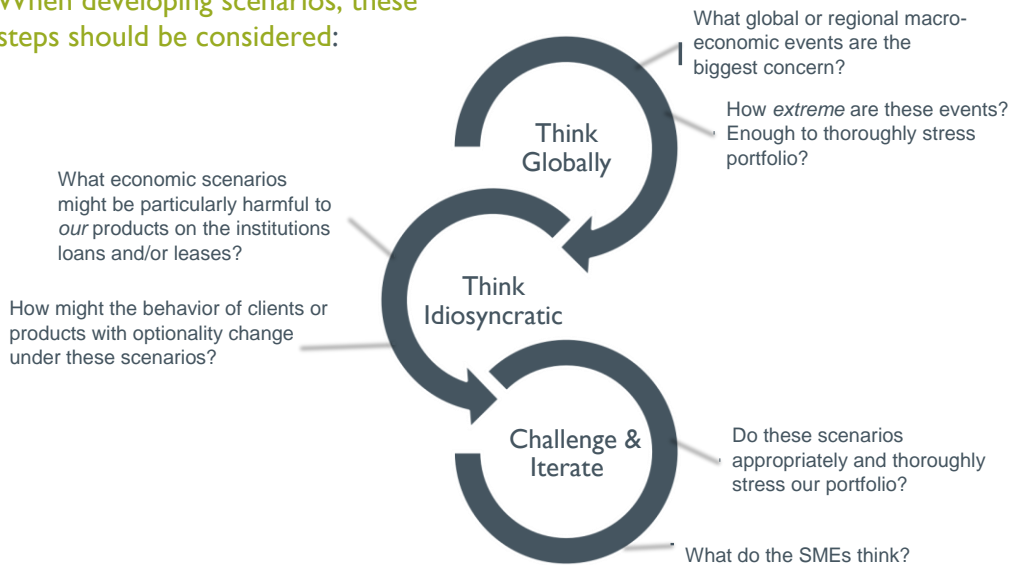
¹ FASB, Financial Instruments—Credit Losses (Topic 326), No. 2016-13, Page 2 June 2016

² FASB, Financial Instruments—Credit Losses (Topic 326), No. 2016-13, Page 6 June 2016

³ FASB, Financial Instruments—Credit Losses (Topic 326), No. 2016-13, Page 15 June 2016

Building Scenarios – The Big Picture

When developing scenarios, these steps should be considered:



*Not exhaustive

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The diagram above provides a macro view of the consideration, as well as some of the rationale behind them. Each of these considerations will likely be factors that will significantly affect the effort required to both create and maintain the CECL process.

What Are the Scenarios?

CECL does not prescribe the use of specific estimation methods. Rather, allowances for credit losses may be determined using various methods that reasonably estimate the expected collectability of financial assets and are applied consistently over time. For example, acceptable methods include:

- loss rate
- roll-rate
- vintage analysis
- discounted cash flow
- probability of default/loss given default methods

Neither a vintage nor a discounted cash flow method is required for estimating expected credit losses. Additionally, an institution may apply different estimation methods to different groups of financial assets. To properly apply an acceptable estimation method, an institution's credit loss estimates must be **well supported**.

Institution Types and Some Areas of Sensitivity

Type	Business	Sensitivity
Money Center & Universal Banks	<ol style="list-style-type: none"> 1. Lend to large corporations, governments, and other banks 2. Broad segments of retail, wholesale & investment banking 	<p>Global macroeconomic events</p> <p>Market volatility</p> <p>Initiatives involving liquidity</p>
Regional Banks	<ol style="list-style-type: none"> 1. Offers a suite of products: credit cards, mortgages, term deposits... 2. Limited footprint (e.g. an area of the country) 	<p>Regional macroeconomic events and systemic global events</p> <p>Economic conditions that impact behavioral optionality</p>
Community Banks & Credit Unions	<ol style="list-style-type: none"> 1. Offers a suite of products: credit cards, mortgages, term deposits... 2. Community footprint 	<p>Microeconomic, regional, and systemic global events</p> <p>Economic conditions that impact behavioral optionality</p>
Captives	<ol style="list-style-type: none"> 1. Covers broad retail & institutional customer segments 2. Large concentrated portfolios of loans and leases 	<p>Global macroeconomic events with more significance from footprint</p> <p>Idiosyncratic events that impact behavioral optionality</p>

Example Scenario

The 2016 CCAR scenario below provides some insight into the possible variables and ranges that may be incorporated in CECL scenarios depending on an institution's view of how the future could fare.

Macroeconomic Variable	Base		Adverse		Severely Adverse	
	Min	Max	Min	Max	Min	Max
Real GDP Growth	2.0	2.8	-3.5	3.3	-8.9	4.5
Nominal GDP Growth	4.2	4.8	-1.4	4.9	-7.1	5.5
Real Disposable Income Growth	2.2	4.0	-1.8	2.9	-5.1	3.3
Nominal Disposable Income Growth	4.3	6.1	-0.2	4.6	-3.8	4.5
Unemployment Rate	3.7	4.1	4.5	7.0	5.0	10.0
CPI Inflation Rate	1.9	2.4	1.3	2.1	0.9	1.8
3-Month Treasury Rate	1.4	2.7	0.1	0.6	0.1	0.1
5-Year Treasury Yield	2.2	3.1	0.0	0.9	1.9	1.9
10-Treasury Yield	2.6	3.6	0.7	1.9	2.4	2.4
BBB Corporate Yield	4.1	5.2	3.8	4.8	5.0	8.1
Mortgage Rate	4.1	5.3	3.2	4.0	4.7	6.0
Prime Rate	4.6	5.8	3.2	3.8	3.2	3.3
Dow Jones Total Stock Index	28,019	32,371	19,718	26,625	9,689	20,168
House Price Index	196	212	171	191	136	186
Commercial Real Estate Price Index	282	320	237	272	167	262
Market Volatility Index	15.3	23.9	18.3	33.7	14.4	62.4

The use of multiple scenarios allows the institution to understand a range of possible outcomes and is preferred to only reviewing the expected outcome. This process has to be completed carefully as nonlinearities can be introduced depending on the product base and the modelling techniques used. In addition, sensitivity testing is highly recommended for all the key variables. This allows the institution to gain an understanding of the impact of errors in their macroeconomic forecast and to therefore take prudent actions for their CECL measurement. Standard interest rate sensitivity scenarios are given below:

Scenario
Parallel shock up
Parallel shock down
Steeper shock (short rates down and long rates up)
Flattener shock (short rates up and long rates down)
Short rates shock up
Short rates shock down

Challenges

Implementing a scenario platform is ripe with challenges. The most common are:

- data
- technology
- process
- Subject matter expertise

Data is an area where most institutions have not historically spent too much attention. The amount of data stored is generally too short, too limited in breadth and of poor quality. In many instances the data is manually input rather than automated flow into the data lake. Data also tends not to be standardized across the organization so that different definitions or business uses are captured without storing in different fields. A well thought out data strategy and architecture with proper governance is required.

New technology applications will be required for CECL. Most institutions will not have an existing technology platform that could be leveraged as this process is almost entirely new. In some instances, aspects of existing platforms may be leverageable but each must be considered on a case by case basis. Also, contrary to many existing incurred loss methodology implementations, it is recommended that manual processes be eliminated or kept to an absolute minimum if required.

In most cases the process will need to be redesigned, an area in which experience and subject matter expertise is crucial, with some potential new steps introduced relative to the incurred loss methodology process. FRG's implementation experience with a variety of organizations would suggest that the process redesign should also look to increase the amount of integration with other existing processes such as CCAR and DFAST and IFRS 9 if applicable. In many instances this can allow for the introduction of increased automation resulting in an easing of the process redesign transparency, repeatability and auditability requirements.

More Information

FRG would welcome the opportunity to speak with you concerning the findings of this paper, as well as how the approaches developed may fit into specific environments. For more information contact the FRG Research Institute at Research@frgrisk.com or 919.439.3819. Visit us online at www.frgrisk.com.

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