

Are you prepared?



## FASB's CECL Model for Impairment – Demystifying the Proposed Standard

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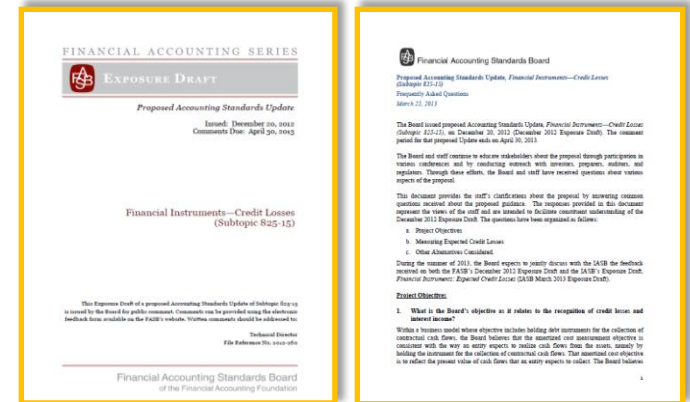
## Impairment: Introduction

### FASB Proposed ASU, “Financial Instruments: Credit Losses” (Subtopic 825-15)

- Issued on December 20, 2012
- Comments were originally due April 30, 2013; on March 28, the FASB decided to extend the deadline to May 31, 2013
- Newly created subtopic, “Financial Instruments: Credit Losses (Subtopic 825-15)”
- Proposed U.S. GAAP guidance is only 27 pages
- Proposed ASC changes represent 94 pages

### FASB FAQ

- Issued on March 25, 2013 (16 pages)





## The Background

### Financial Crisis Advisory Group (FCAG)

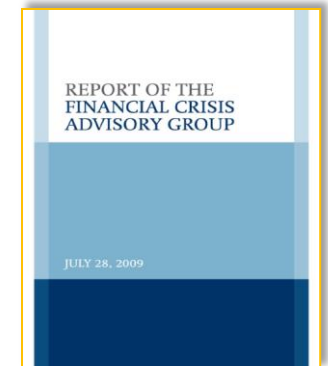
- Formed by FASB & IASB in 2008
- Final report issued July 28, 2009

### Problems identified

- Delayed recognition of losses associated with loans and other financial assets
- Complexity of multiple impairment approaches

### Recommendation

- Explore an alternative to the incurred loss model that would utilize forward looking information





## Overview: The CECL Model

Current Expected Credit Loss (CECL) is defined as:

- “An estimate of all contractual cash flows not expected to be collected from a recognized financial asset (or group of financial assets) or commitment to extend credit.”

### Scope

- Loans (including loans made by not-for-profits to meet their mission), debt securities, trade receivables, reinsurance receivables, lease receivables, non-FV/Ni loan commitments, and financial guarantee contracts that are not insurance or FV/Ni
- Excludes loans to participants in defined contribution plans, policy loan receivables for insurance companies, promises to give (pledge receivables) of not-for-profit entities, related party loans, and receivables from entities under common control.





## Overview: The CECL Model

Considers more forward-looking information than is permitted under current U.S. GAAP

- Based on relevant information about past events, current conditions, and reasonable and supportable forecasts that affect the expected collectability of the financial assets' remaining contractual cash flows
- Includes quantitative and qualitative factors specific to borrowers and the economic environment in which the entity operates. In addition to evaluating the borrowers' current creditworthiness, the assessment includes an evaluation of the forecasted direction of the economic cycle



## Tentative Decisions (through Oct. 29th)

### Tentative decisions - Decided to continue to refine the CECL model

- Consider available information relevant to assessing the collectability of contractual CFs, including information about past events, current conditions, and reasonable and supportable forecasts, when developing an estimate of expected credit losses
- Consider relevant qualitative and quantitative factors that relate to both the environment in which the entity operates and those that are specific to the borrower
- Consider all contractual cash flows over the life
- Consider expected prepayments; should not consider expected extensions, renewals, and modifications unless anticipate executing a TDR
- Required to evaluate financial assets on a collective (pool) basis when similar risk characteristics exist
- For an individual financial asset, an entity should consider relevant internal information and should not ignore relevant external information
- Should always reflect the risk of loss, even when remote; however, not required to recognize a loss the risk of nonpayment is > zero yet the amount of loss would be zero.
- In addition to discounted cash flow modeling, not prohibited from using loss-rate methods, probability-of-default methods, or a provision matrix using loss factors



## Tentative Decisions (through Oct. 29th)

Revert to a historical average loss experience for the future periods beyond which the entity is able to make or obtain reasonable and supportable forecasts

Permitted to revert over:(a) the financial asset's estimated life on a straight-line basis or (b) a period and in a pattern that reflects the entity's assumptions about expected credit losses over that period

- For example, if expected losses over the next two years are 10 bps and the unadjusted historical loss experience is 15 bps, the straight-line reversion would be as follows:

Example	Historical Experience	Forecast Period (Years 1-2)	Periods Beyond Forecast (Years 3 and beyond)
Portfolio A	Historical Loss Experience	Expected Losses in Forecast Period	Expected Losses based on Reverting to Historical Loss Experience

Year	1	2	3	4	5	6	7
Expected Losses	10 bps	10 bps	11 bps	12 bps	13 bps	14 bps	15 bps





## Tentative Decisions (through Oct. 29th)

### Debt securities

- HTM – use CECL model
- AFS – retains “other than temporary impairment” (OTTI) model
  - Will use an allowance instead of direct write-off (so permits reversals)
  - Will remove the criteria to consider the length of time and extent that  $FV < cost$
  - Will remove the criterion to consider recoveries or additional declines in value post B/S
- If subsequently identified for sale, adjust the allowance to equal to the difference between fair value and amortized cost basis.

### TDRs

- Largely unchanged - Record a basis adjustment (rather than an allowance)
  - Adjustment is calculated using the modified contractual cash flows, discounted at the original effective interest rate
- For some TDRs, might need to increase the cost basis with corresponding credit to allowance
- Can consider prepayments and prospectively adjust yield if speed differ from expected

### Nonaccrual of Interest Income

- Non-accrual guidance was removed from the proposed accounting standard.
- Pre-agenda research to be conducted to determine whether U.S. GAAP should provide nonaccrual guidance.



## Tentative Decisions (through Oct. 29th)

### Purchased Credit-Impaired (PCI) financial assets

- Contemplates use of existing systems
- Establish a day one allowance – significant shift from current GAAP
- Permits increases in expected cash flows to be recognized immediately
- Decided not to expand the scope to apply to all acquired financial assets
- Must allocate non-credit component to each asset

### Certain Beneficial Interests – Purchased & Retained

- Measure and recognize an allowance for expected credit losses for which there is a significant difference between contractual and expected CF (consistent with the PCI guidance)
- Changes in expected cash flows due to factors other than credit should be accreted into interest income over the life of the asset

### Write-off Guidance

- Reverting to current US GAAP for write-off guidance.
- *Original Exposure Draft* – “no reasonable expectation of future recovery”
- *Current US GAAP* – “in the period in which the financial assets are deemed uncollectible”



## Tentative Decisions (through Oct. 29th)

### Collateral Dependent

- Retains the use of the collateral dependent method but re-defined “A financial asset for which the repayment is expected to be provided primarily or substantially through the operation (by the lender) or sale of the collateral, based on an entity’s assessment as of the reporting date.”

### Disclosures

- Factors that influenced CECL, changes factors, and reasons for changes
- Information related to “reasonable and supportable forecasts about the future” to enable a user to understand factors that influenced the estimate of the allowance
- Policies for writing off uncollectible receivables and for accounting for nonaccrual financial assets
- Qualitatively describe the reason for changes in the extent of collateralization in collateral dependent financial assets (e.g. deterioration)
- Past-due information for all financial assets within the scope of CECL
- No decision on AFS debt securities or roll-forward disclosures (Staff researching)
- No decision on reinsurance receivables, programmatic loans, financial guarantees (Staff researching)



## FASB Next Steps

### Various open items

- Staff illustration prospective yield adjustments on TDRs
- Available for sale debt securities disclosures
- Roll-forward disclosures
- Staff research on the definition of originations to be included in roll forward disclosures

### Transition & effective date

- As proposed - record a cumulative-effect adjustment as of the beginning of the first period in which the guidance is effective (offset to retained earnings)
- None proposed but sought feedback on early adoption and nonpublic entities

FASB plans to issue a final standard in 2015

Data point: Effective date of IASB's IFRS 9 is Jan. 1, 2018



## Poll #1: CECL Preparation

What **BEST** describes your plan of preparation for the new pronouncement on credit losses?

- A. Followed the issue closely and prepared a preliminary estimate of the impact to my organization.
- B. Generally aware of the issue and that 2015 is the year targeted for preparation and analysis.
- C. Will deal with it when our accounting firm gives some guidance.
- D. This is my first webinar attended on the topic and am learning as the slides progress.
- E. I'm interested in the topic, but will not be involved with the planning and implementation details for a particular organization (i.e. auditor, regulators, etc.).



## Breaking Down Tentative Decisions

Consider available information relevant to assessing the collectability of contractual CFs, including information about past events, current conditions, and reasonable and supportable forecasts, when developing an estimate of expected credit losses

What does “reasonable and supportable forecast” mean?

- Traceable, auditable
- Consider SR 11-7 guidance regarding model risk management
- Consider interagency guidance (SR 06-17) regarding qualitative factors

Where might one obtain forecast information?

- Industry analysts
- Trade associations
- Federal Reserve Publications
- Fixed Income Analysts



## Breaking Down Tentative Decisions

Consider expected prepayments; should not consider expected extensions, renewals, and modifications unless anticipate executing a TDR

What factors should be considered in formulating a prepayment expectation?

- There will be heightened sensitivity to the prepay assumption given the impact on the allowance
- Consider auditability and actual history/trends of the subject portfolios
- Market statistics on CMBS, RMBS bond performance may be helpful in formulating the assumption
- Asset quality may impact the assumption – i.e. what's the likelihood a Substandard rated loan will prepay?
- Note and rate structures – fixed vs. variable rate considerations, spreads to indices, teaser rates, etc.
- Current and forecasted rate environments may need to be assessed to adequately assess prepayment



## Breaking Down Tentative Decisions

Should always reflect the risk of loss, even when remote; however, not required to recognize a loss when the risk of nonpayment is  $>$  zero yet the amount of loss would be zero.

What does this mean and where might this be applicable?

- Possibly deposit secured loans or other situations where collateral is always well in excess of loan.
- Should not be confused with normal LTV's.
  - On an aggregate or pool basis, most loan types despite existence of strong origination LTVs still present a lifetime risk of loss.
  - Think of pre-2008 portfolios and how they reacted.





## Breaking Down Tentative Decisions

For an individual financial asset, an entity should consider relevant internal information and should not ignore relevant external information

What are some “relevant external” data points that may be helpful?

- Peer and geographic loss rates obtainable from SNL or other industry publications
- Securitized portfolio performance for like assets (PD, LGD, Prepay studies)
  - Rating Agency and Fixed Income Analyst data
  - Servicer reporting
- Consumer default trends from scoring agencies
- Home Price Indices, Commercial Property Indices



## Poll #2: System Capacity for CECL

How robust is the capability of your accounting system (or the systems of the banks you audit or regulate) to deliver detailed information about historical loan losses?

- A. The system will deliver adequate information to support our assumptions about the life cycle of loans.
- B. Our system will need minimal to moderate adjustment.
- C. Our system will need replacement.
- D. We have no idea.



## Methodology Discussion – Static Pool/Cohort Analysis

Cohort (often referred to as Static Pool) analysis is a way of identification of like assets and tracking those assets over a period of time.

The base loss analysis using static pools based on origination date may be a starting point for most loan types.

- Gives a baseline assumption for loss rates by tracking over the life of the static pool
- In addition to charge-off/recovery stats these pools may be used to track migration statistics, probability of default, transition matrices through risk rating, loss severity upon default, etc. for more complex modeling



## Methodology Discussion – Static Pool/Cohort Analysis

### Common Cohort Analysis –

- Origination date/Vintage basis
- Risk rating basis
- Past due basis
- Credit score basis
- LTV basis

Institutions will need to analyze a variety of approaches to assess how best to analyze their portfolio.

Institutions need to consider how recoveries will be tracked and utilized to adjust loss rates.



## Methodology – Life of Loan Losses

### Acceptable Methodologies

- Loss Rate Models
  - Average charge-off
  - By Vintage
  - Static pool
- Roll-rate
- Discounted Cash Flow
- Probability of Default / Loss Severity

### Statistical Analysis

### Back-testing



## Loss Rate Model Consideration

Qualitative adjustments will likely still be required to formulate expected losses for macro-level factors based on the current point in the economic cycle

- Must make override assumptions to historic loss trends to capture borrower behavior regarding default probabilities and collateral values
- Other methodologies (such as probability-of-default methods) handle individual subjective adjustments that can be supported at the factor level (such as prepayment speeds or collateral value changes) and derive changes in estimates accordingly.



## Loss Rate Models – Average Charge-off

Most common methodology under current incurred loss modeling:

- Typically only calculates an average annualized charge-off factor
- Methodology will need to be converted to capture a life of loan loss estimate under CECL

### From Dec. 2012 Exposure Draft

**825-15-55-24** It typically would be inappropriate to estimate the expected credit losses for a long-term asset by multiplying an annual loss rate (that is, the net amount written off in a 12-month period divided by the average amortized cost) by the remaining years of the asset's contractual term because loss experience is often not linear. That is, for certain types of lending, credit losses are low shortly after origination, rise rapidly in the early years of a loan, and then taper to a lower rate until maturity. When estimating expected credit losses under this Subtopic, the loss rate should be commensurate with the current credit risk of the financial asset.

Options for deriving the expected credit loss might include:

- Static pool analysis
- Application of dynamic annual charge-off and prepayment modeling



## Loss Rate Model – By Vintage

Measures impairment based on the age of the accounts and the historical asset performance of assets with similar risk characteristics

- This analysis best takes into account the seasoning of the loan relative to loss trends and timing
- Under CECL rather than assigning the loss based on a point on the loss curve correlating to the financial asset's age, loss rates are determined by the remaining area under the curve.

For example, a pool of similar five-year financial assets might show loss experience as follows:

Loss Experience by Year Following Origination				
Year 1	Year 2	Year 3	Year 4	Year 5
0.25%	0.50%	1.00%	0.75%	0.00%

Typically, the incurred losses for a pool of assets in year three would be 1 percent.

However, based on the historical loss experience shown in the table, the total expected losses for the life of a loan in year three would be 1.75%, which is the accumulation of year 3 – 5.





## Roll-Rate or Migration

The roll-rate method is often referred to as “migration analysis” or “flow model” and is based on determining a prediction of credit losses based on segmentation (by delinquency or risk rating, for example) of a portfolio of financial assets.

- Limitations on time series length, data integrity, and population sizes may need to be supplemented with judgments and further calibrated over time to improve precision.
- Migration analysis based on risk ratings is dependent on the accuracy and timely update of the underlying data set.



## Discounted Cash Flows

### Best Estimate (*Current US GAAP*) vs. Probability Weighted Approach (*CECL*)

#### Best Estimate Example Assumptions

- 90 Days Past Due
- Amortized Cost = \$5,100,000
- Collateral Value = \$4,290,000 \*
- Effective Yield - 12%
- Payment Term - P&I
- Maturity Date - 11/30/2014
- Remaining Term - 11 months

\* Less estimated selling costs

#### Probability Weighted Example Assumptions

Same as **Best Estimate**, but assume this represents an instrument assessed collectively within a group of assets of similar risk and vintage.

Base Component-Loss Given Default (LGD) = 16%\*  
Risk Adjustment-Probability of Default (PD) = 90%\*

\* *The base component and risk adjustment are specific to a given point in time. Many factors could be considered to derive the PD such as the economic cycle, vintage (static pool), and credit quality of the instruments. The estimated loss and risk of default will change throughout the life of the instrument or cohort (group).*



# Discounted Cash Flows (continued)

## Best Estimate (Current US GAAP) vs. Probability Weighted Approach (CECL)

Period	Expected Cash Flows
1/31/2014	\$ -
2/28/2014	-
3/31/2014	-
4/30/2014	-
5/31/2014	-
6/30/2014	-
7/31/2014	-
8/31/2014	-
9/30/2014	-
10/31/2014	-
11/30/2014	4,290,000
<b>Total</b>	<b>\$ 4,290,000</b>

Period	Path 1	Path 2	Expected Cash Flows
	10% Probability	90% Probability	
1/31/2014	\$ 491,916	\$ -	\$ 49,192
2/28/2014	491,916	-	49,192
3/31/2014	491,916	-	49,192
4/30/2014	491,916	-	49,192
5/31/2014	491,916	-	49,192
6/30/2014	491,916	-	49,192
7/31/2014	491,916	-	49,192
8/31/2014	491,916	-	49,192
9/30/2014	491,916	-	49,192
10/31/2014	491,916	-	49,192
11/30/2014	491,916	4,290,000	3,910,192
<b>Total</b>	<b>\$ 5,411,074</b>	<b>\$ 4,290,000</b>	<b>\$ 4,402,107</b>

**Current Expected Credit Loss – Best Estimate**

- PV Expected Cash Flows = \$3,845,229
- Amortized Cost = \$5,100,00
- Expected Credit Loss = (\$1,254,771)

**Current Expected Credit Loss – Probability Weighted**

- PV Expected Cash Flows = \$3,970,706
- Amortized Cost = \$5,100,00
- Expected Credit Loss = (\$1,129,294)



## Methodology – Statistical Analysis

Regression analysis might be a strong statistical tool to quantify or assess the predictive power of a particular set of assumptions.

In particular, this type of analysis can be useful for developing support for quantitative associations between macroeconomic factors and losses. For example:

- One could use regression analysis on economic data such as unemployment and bankruptcy rates to forecast loss rates on consumer loan products.
- Using collateral pricing curves, one might use regression analysis on actual loss-severity data to assess the predictive power of a particular assumption (such as the impact of changes in home price indices to change in loss-given-default).



## Methodology – Back Testing

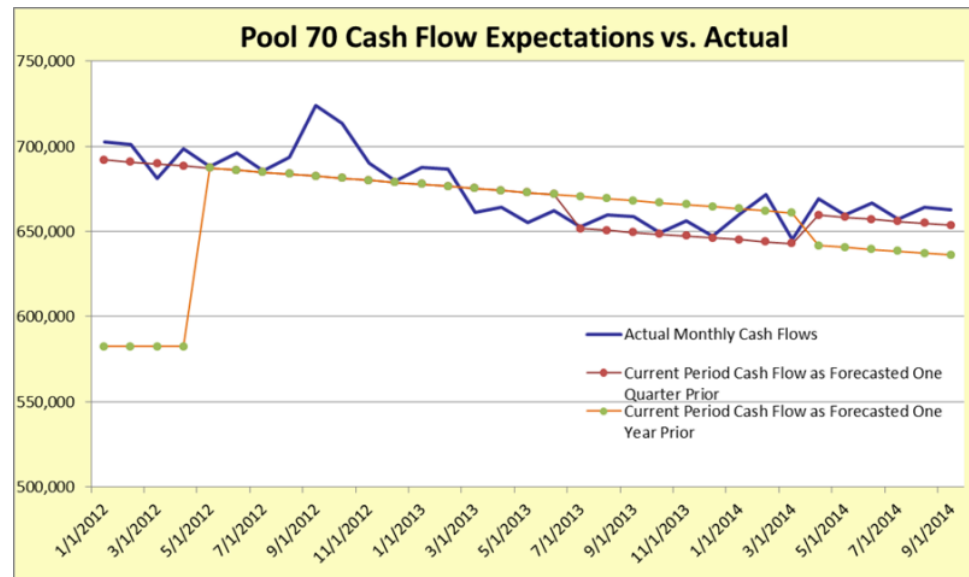
Unique issue inherent in this new model:

- There is no side-by-side testing of the old model to gauge reasonableness of the results.
- How to handle ‘economic crisis’ era loss trends and adjustments to arrive at the current economic cycle.

To the extent data is available, consider back-testing the model throughout implementation to continue to refine approach and increase precision.

Back-testing can be performed over a time series to test prepayment, loss, or cash flow estimation.

For example, testing one period prior estimate to actual, and one year prior estimated cash flow to actual may look something like this:





## Methodology - Implementation

- Identify a working group and assign responsibilities
- Assess data limitations and data warehousing capability
- Identify manual processes now and changes necessary under CECL
- Begin to assemble data now regarding static pools and other observable data points
- Discuss current practices for estimating losses, common risk characteristics and brainstorm relevant approaches to be utilized under CECL
- Consider reasonable and supportable forecast adjustments that maybe needed under CECL
- Revise policies and procedures documentation
- Consider audit-ability of approaches including data integrity



## Poll #3: CECL Preparation

How many years of preparation do you suggest is needed between the standard being finalized and the first year of implementation?

- A. 1 year
- B. 2 years
- C. 3 years
- D. 4 years



## FAQ's

### **How is CECL different from SOP 03-3 (ASC 310-30)?**

SOP 03-3 as we know it today will no longer exist. Pool accounting is retired. There will no longer be an accretible difference or non-accretible difference. The difference between the UPB and fair value at the time of purchase will be segregated by a credit and non-credit mark. The amortized cost of purchase credit impaired (PCI) instruments will be the purchase price plus the credit mark (expected credit loss at acquisition). The difference between the amortized cost and the UPB (non-credit mark) is amortized or accreted into income. Interest income (if not in non-accrual) will be recognized based on the amortized cost and the remaining contractual cash flows.





## FAQ's

### **How will I forecast for commitments?**

The funded portion of loan commitments will be estimated in the same manner as other loans.

The expected credit loss for the unfunded loan commitment should reflect the full contractual period over which the entity is exposed to the credit risk unless unconditionally cancellable by the issuer.

The estimate must consider the likelihood that funding will occur and an estimate of expected credit losses on commitments expected to be funded.

The estimate of expected credit losses on unfunded loan commitments will be presented on the statement of financial position as a liability.



## FAQ's

### **Do I have to recognize a loss if the estimated collateral value is greater than the exposure?**

No. The estimate of expected credit loss should always reflect the risk of loss, even when the risk is remote, however, an entity will not be required to recognize a loss when the amount of the loss would be zero. The final standard will not explicitly state when zero allowance of expected credit losses will be appropriate, however, a scenario where the estimated collateral value is greater than loan balance would fit this description.



## FAQ's

### Can I use the collateral value to calculate the expected loss?

For collateral dependent assets, the reserve will be measured by the difference between the collateral's fair value (less selling costs) and the amortized cost basis of the asset.

The definition of collateral dependent will be updated to - *A financial asset for which the repayment is expected to be provided **primarily or substantially** through the operation (by the lender) or sale of the collateral, based on an entity's assessment as of the reporting date. **Primarily or substantially** will replace **solely**.* Many believe that this expands the definition of collateral dependent and increases the number of assets for which this practical expedient can be applied.



## FAQ's

### **What about Troubled Debt Restructurings (TDRs)?**

Troubled debt restructurings are still relevant from an identification and reporting perspective. In accordance with ASC 310-40, TDRs represent an effort on the part of the bank to recover its investment, therefore, a TDR is considered to be an extension of the original loan. CECL will require that a permanent cost basis adjustment be made to the loan, establishing the amortized cost basis equal to the net present value of the post-modified contractual cash flows discounted by the original (pre-modified) effective yield. The pre-modified effective yield will also be used to discount the expected credit loss for the purpose of calculating the allowance. The FASB has confirmed during deliberations that this could result in a write-up of the cost basis post-modification, followed by a corresponding increase in the allowance for expected credit losses in certain TDRs (Feb. 19, 2014). The allowance for TDRs would be calculated per the proposed accounting standards update, CECL.



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