



COUNTDOWN TO CECL

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Defining Risk

- Possibility of incurring loss
- Vulnerability to a negative outcome

What is ACL?

For financial institutions adopting the CECL methodology, an Allowance for Credit Losses (ACL) for loans replaces the former Allowance for Loan and Lease Losses (ALLL). Both methodologies provide for an estimate of uncollectible amounts maintained through a valuation account adjusted through charges to operating income. The measurement framework and conceptual basis supporting an ACL differ, however, from those of the allowance for loan and lease losses.

FASB/NCUA Historical Perspective Evolution

- ❑ **Accounting Standards Update (ASU) No. 2016-13, Financial Instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments** – effective July 2016
- ❑ Implementation for Credit Union extended to fiscal period beginning January 1, 2023
- ❑ Introduction of the Weighted Average Remaining Maturity (WARM) method
- ❑ Federal Reserve issues Scale Model for Banks
- ❑ NCUA's version of Scale Model for Credit Union still pending approval by the Financial Accounting Standards Board.

What is CECL?

Under CECL, ACLs are estimates of the expected credit losses on financial assets measured at amortized cost, which is measured using relevant information about past events, including historical credit loss experience on financial assets with similar risk characteristics, current conditions, and reasonable and supportable forecasts that affect the collectibility of the remaining cash flows over the contractual term of the financial assets.

Why CECL?

- ✓ Great Recession 2008 through 2011
- ✓ Introduction of Qualitative and Environmental Factors
- ✓ Troubled Debt Restructures increase
- ✓ Real estate foreclosures increase
- ✓ Delinquency and loss ratios double
- ✓ More than 1,000 credit unions (12%) merged or liquidated
- ✓ GAO study cited “Incurred Loss Model” as significant factor in financial institution failures

Key Expectations From CECL?

- ❑ Can be done on a worksheet
- ❑ Perfection not expected on Day One may be fine tuned throughout 2023.
- ❑ Calculation of ACL can be done quarterly
- ❑ A high degree of management judgement still required
- ❑ First public disclosure will be on the March 31, 2023 Call Report

WARM method vs. SCALE method

FASB and NCUA have approved and are promoting two primary CECL methodologies:

1. Weighted Average Remaining Maturity (**WARM**)
2. Scaled CECL Allowance Loss Estimator (**SCALE**)

WARM allows for credit migration to be employed to differentiate between loans that are stable (no risk change) improving (increasing credit status) and deteriorating (decreasing credit status)

SCALE is a static pool application that assumes all loans in a pool have similar risk

TCT Risk Solutions has created CECL applications employing each of these methodologies to provide credit unions to choose the option that best suits their operations.

It is important to note the impact of each methodology before making the choice.

TCTs **WARM** method explained

WARM allows for credit migration to be employed to differentiate between loans that are

- ✓ Stable (no risk change)
- ✓ Improving (increasing credit status) and
- ✓ Deteriorating (decreasing credit status).



WHAT IS
CREDIT
MIGRATION
& WHY
SHOULD YOU
CARE?

In this presentation we will tell the story of four individuals that represent credit union members.

Understanding their stories will help us improve our lending and serve our members better.

Sit back and enjoy the story of CREDIT MIGRATION...



Ruth



Good ole' Ruthie has a high B credit score.
She never gets too wild. She buys the same things
month after month, she never overspends.
Good Ole' Ruthie is still a high B today!



Henry

When Henry first came to your Credit Union, he had A+ credit.

Several months ago, Henry lost his job, but he didn't change his lifestyle.

He started living off credit cards and today his credit score is a D.



Liz

Liz is a credit newbie.

Your credit union decides to take a chance and approve her for a car loan.

Over the past few months, she has built her credit up to an impressive A+.

Was down on his luck when your credit union financed a car loan for him. His credit was a D.

However, his luck turned around and he was able to find a job, make payments on time and even save a buck or two.

Today his credit score is an A.



John



One Year Ago...

- Henry was an A+
- Ruth was a B
- Liz had NO CREDIT
- John was a D



Here they are today...

- Liz: NO CREDIT to A+ **IMPROVED**
- John: went from D to A **IMPROVED**
- Ruth: remains a B **STABLE**
- Henry: dropped from A+ to D **DETERIORATED**

Expected Credit Loss Formula

$$RT = (RC + GA) + (RIC + REC)$$

RT = Total Risk

RC = Core Risk

GA = Grade Adjustment

RIC = Individual Risk Change

REC = Economic Risk Change

Sample WARM Calculation

New Vehicle	Adj Balance	Life Loss Rate	Dist. Factor	Base Loss Rate	Management Adjustment	Adjusted Loss Rate	CECL ACL
A+	\$ 8,891,897.85	0.43%	10.52%	0.05%	0.65%	0.70%	\$ 61,862.92
A	\$ 3,923,288.42	0.43%	22.93%	0.10%	0.65%	0.75%	\$ 29,410.02
B	\$ 1,842,385.39	0.43%	45.15%	0.20%	0.65%	0.85%	\$ 15,590.16
C	\$ 961,189.94	0.43%	116.10%	0.50%	0.65%	1.15%	\$ 11,097.42
D	\$ 418,915.32	0.43%	231.17%	1.00%	0.65%	1.65%	\$ 6,931.41
E	\$ 85,969.03	0.43%	342.04%	1.49%	0.65%	2.14%	\$ 1,836.62
Not Reported	\$ -	0.43%	350.21%	1.52%	0.65%	2.17%	\$ -
Total	\$ 16,123,645.95						\$ 126,728.56

Expected Credit Losses

Regression analysis identified the following factors as the primary predictors of impending loss

- Deterioration of credit score
- Advanced delinquency
- Changing income or discretionary cash flow
- Changing economic conditions (relates to employment and cash flow)
- Loan to value (subject to existing risk change)



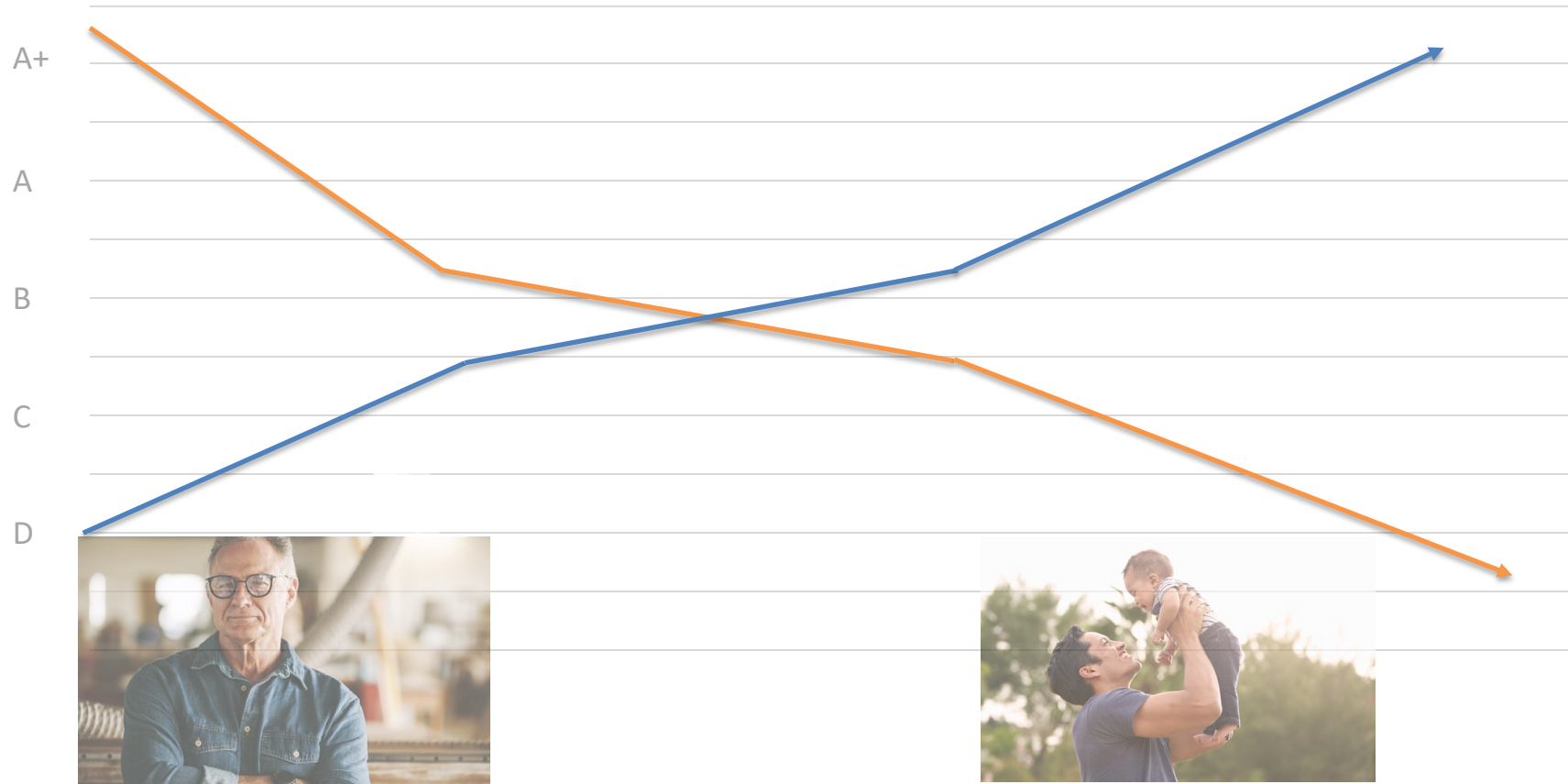
Expected Credit Losses

Economic Factors that are statistical valid predictors of expected loss:

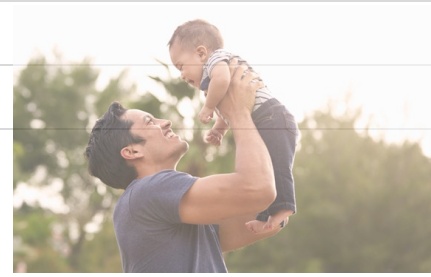
1. Net Credit Change
2. Advanced Delinquency
3. Economic Stress Score
 - Unemployment
 - Foreclosure
 - Bankruptcy



Let's take a look at the B Group



→ Henrys with
Increasing unsecured debt
Increasing loan balances
Decreasing credit scores



→ Johns with
Decreasing or stable unsecured debt
Decreasing or stable loan balances
Increasing credit scores

Examples of Changing Risk Exposure

A member with a credit score in the A range requests an auto loan with an original balance of \$20,000.

$$\$20,000 \times 0.10\% = \$20$$

Borrower experiences a set back and his credit score drops to the C range the loss rate increases to 0.50%

$$\$20,000 \times 0.50\% = \$100$$

Borrower's credit score continues to decline to the E range the loss rate on this loan increases to 8.13%

$$\$20,000 \times 1.52\% = \$304$$

Result of the declining credit score is an increased Allowance of \$284.

Examples of Changing Risk Exposure

A member with a credit score in the D range applies for an auto loan with an original balance of \$20,000.

$$\$20,000 \times 1.49\% = \$298$$

Member up-migrates by improving the credit score into the B range, the loss rate reduces to 0.50%

$$\$20,000 \times 0.50\% = \$100$$

Member continues to improve to A+ range, then the loss rate reduces to 0.35%

$$\$20,000 \times 0.05\% = \$10$$

Results of the improving credit score is a reduction in allowance of \$288.

Loss Comparison Study

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Total
Visa Actual	\$1,949	\$8,779	\$3,799	\$5,356	\$6,724	\$8,745	\$58	\$17,286	\$52,696
Visa CM	\$1,048	\$3,467	\$1,650	\$2,329	\$2,719	\$4,650	\$58	\$8,250	\$24,171
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Total
Unsecured Actual	\$8,688	\$17,460	\$30,893	\$4,478	\$18,136	\$57,121	\$31,050	\$59,274	\$227,100
Unsecured CM	\$3,650	\$7,400	\$11,250	\$2,000	\$6,750	\$31,250	\$16,100	\$22,000	\$100,400
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Total
Auto Actual	\$2,720	\$0	\$0	\$22,346	\$1,985	\$0	\$6,938	\$5,099	\$39,088
Auto CM	\$550	\$0	\$0	\$6,540	\$0	\$0	\$2,500	\$1,500	\$11,090

ALLL Comparison Study

	Loss History	Ave Balance	Loss Rate	QE Balance	ALLL Required
Visa Actual	\$52,696	\$860,739	6.12%	\$ 914,173	\$ 55,967.16
Visa CM	\$24,171	\$860,739	2.81%	\$ 914,173	\$ 25,671.52
Difference	\$28,525	\$860,739	3.31%	\$ 914,173	\$ 30,295.64
	Loss History	Ave Balance	Loss Rate	QE Balance	ALLL Required
Unsecured Actual	\$227,100	\$ 4,346,104	5.23%	\$ 4,328,983	\$ 226,205.41
Unsecured CM	\$100,400	\$ 4,346,104	2.31%	\$ 4,328,983	\$ 100,004.49
Difference	\$126,700	\$ 4,346,104	2.92%	\$ 4,328,983	\$ 126,200.92
	Loss History	Ave Balance	Loss Rate	QE Balance	ALLL Required
Auto Actual	\$39,088	\$ 6,772,134	0.58%	\$ 5,487,635	\$ 31,674.04
Auto CM	\$11,090	\$ 6,772,134	0.16%	\$ 5,487,635	\$ 8,986.51
Difference	\$27,998	\$ 6,772,134	0.41%	\$ 5,487,635	\$ 22,687.53

TCTs WARM method explained

WARM allows for credit migration to be employed to differentiate between loans that are stable (no risk change) improving (increasing credit status) and deteriorating (decreasing credit status)

Key Assumptions Underlying WARM with credit migration

- Risk of loss varies over ranges of credit scores
- Loss rates will vary across credit ranges
- Credit scores may vary over time resulting in changing risk
- A decreasing credit score is the most significant indicator of probable loss

TCTs **SCALE** method explained

SCALE is a static pool application that assumes all loans in a pool have similar risk

Key Assumptions Underlying **SCALE**

- ✓ All Borrowers are considered similar
- ✓ Total losses can be averaged against the total pool of loans
- ✓ Risk of Loss can be considered equal across all loans in a pool

TCTs SCALE method explained

SCALE is a static pool application that assumes all loans in a pool have similar risk

Loan Pool	Pool Balance	Individually Identified Loans	Adjusted Pool Balance	Life of Loan Loss Rate	Qualitative Factors Adjustment	Adjusted Loss Rate	Allowance for Credit Loss
New Vehicle	\$ 16,123,645.95	\$ -	\$ 16,123,645.95	0.43%	0.65%	1.08%	\$ 174,871.92

NCUA SCALE method

NCUAs on-line Simplified CECL tool is a static pool application that mirrors the TCT SCALE model.

Here is what NCUA's website says about their tool:

“The NCUA is providing the CECL Tool “as is” and it expressly disclaims all warranties, expressed or implied, including any implied warranties of merchantability and fitness for a particular purpose. The NCUA is not liable to your credit union or any third party for any direct, indirect, incidental, consequential, special, or exemplary damages or lost profit related to using the CECL Tool.”

NCUA SCALE method

NCUAs on-line Simplified CECL tool is a static pool application that mirrors the TCT SCALE model.

This is the NCUA Disclaimer from their Website:

Utilizing the Simplified CECL Tool approach does not by itself ensure compliance with U.S. Generally Accepted Accounting Principles (GAAP) or any other requirement. While ASC 326 (Financial Instruments—Credit Losses) allows entities to use judgment in determining appropriate and relevant information and estimation methods, a credit union’s management is responsible for ensuring the ACL conforms with GAAP and adequately covers risk.

By using the Simplified CECL Tool, you assume the risk related to your use of the tool, including your use of any updates to it. The NCUA is providing the Simplified CECL Tool “as is” and it expressly disclaims all warranties, express or implied, including any implied warranties of merchantability and fitness for a particular purpose. The NCUA is not liable to you or any third party for any direct, indirect, incidental, consequential, special, or exemplary damages or lost profit related to the use of the tool. Users may not modify the Simplified CECL Tool and present it as an official government document.

TCTs SCALE model

- ✓ Independently Validated
- ✓ Calculated and Fully Supported by TCT's qualified staff

Thus, lifting the burden of CECL calculation from credit union staff, management and boards allowing you to focus on your members and their needs.

90-99 Million Dollar Credit Union

Sample Credit Union						
Allowance and Provision for Loan Loss Reserve Comparison of Multiple Methodologies						
For period ending 3/31/2022						
Incurring Methodology			WARM Methodology			SCALE Methodology
ASC 450-20	\$ 27,076.56		ASC 450-20	\$ 43,917.14		ASC 450-20 \$ 123,166.93
ASC 310-10	\$ 23,108.72		ASC 310-10	\$ 23,108.72		ASC 310-10 \$ 23,108.72
Total ACL	\$ 50,185.28		Total ACL	\$ 67,025.87		Total ACL \$ 146,275.65
Current Balance	\$ 17,320.56		Current Balance	\$ 17,320.56		Current Balance \$ 17,320.56
Adjustment	\$ 32,864.72		Adjustment	\$ 49,705.31		Adjustment \$ 128,955.09

WARM method vs. SCALE method

ASSET SIZE	CURRENT ALLL REQ.	WARM METHOD REQ.	SCALE METHOD REQ.	Equity Impact
\$223,317,113	\$157,008	\$167,520	\$256,157	-0.04%
\$82,965,318	\$197,584	\$217,747	\$330,067	-0.14%
\$69,908,287	\$126,892	\$165,581	\$261,758	-0.14%
\$202,695,406	\$927,949	\$1,543,753	\$2,412,400	-0.43%
\$21,102,923	\$33,515	\$49,111	\$75,728	-0.13%
\$132,469,010	\$112,730	\$173,242	\$372,876	-0.15%
\$32,825,780	\$89,673	\$162,155	\$299,183	-0.42%

Basic Data Requirements: WARM

General Data (only needed during initial report set up or unless conditions change):

- ❑ Credit Grades and FICO Ranges
- ❑ List of Loan Codes with a brief description, and the loan pool that each loan code should be included in

FICO RANGES	
GRADE	FICO RANGE
A+	730+
A	729-680
B	679-640
C	639-600
D	599-500
E	<550

Loan Pools		
COLLATERAL CODE	DESCRIPTION	POOL
A	New Auto	Auto
B	Used Auto	Auto
C	Signature	Unsecured
D	LOC	Unsecured
E	Visa	Visa
F	HELOC	Real Estate
G	First Mortgage	Real Estate
ETC.		

Basic Data Requirements: WARM

Monthly Loan Data

- ❑ Monthly balances by pool for previous 12 months
- ❑ Loan Export File including:
 - a. Account (Member) Number
 - b. Loan Suffix
 - c. Loan Codes/Collateral Codes/Purpose Codes
 - d. Current Balance (as of data period ended)
 - e. Original Credit Score
 - f. Current Credit Score
 - g. Original Loan Date
 - h. Days Delinquent
 - i. Interest Rate (optional)
 - j. Total Available Credit (optional)

Basic Data Requirements: WARM

Charge off and Recovery Data

CHARGE OFF DATA FOR PERVIOUS 12 MONTHS INCLUDING:	RECOVERY DATA FOR THE LAST 12 MONTHS:
Account (Member) Number	Account (Member) Number
Loan Suffix	Loan Suffix
Loan Codes/Collateral Codes/Purpose Codes	Loan Codes/Collateral Codes/Purpose Codes
Charge Off Amount	Recovery Amount
Charge Off Date	Recovery Date
Original FICO Score	
FICO Score at the time of Charge off (if available)	

Basic Data Requirements: WARM

Impaired Loan List

A list of your impaired loans (ASC 310-10) from your most recent ALLL calculation. These loans should include all TDR's, Modifications, Bankruptcies, Repossessions, Foreclosures, and any other loans that are in the process of being charged off but are still on your books. Please use the template provided below to enter your impaired loans information.

- a. Impairment Type (TDR, Delinquent loans, etc.)
- b. Account (Member) Number
- c. Loan Suffix
- d. Loan Codes/Collateral Codes/Purpose Codes
- e. Current Balance (as of Date Period Ended)
- f. Days Delinquent
- g. 1st Mortgage Balance if the loan is in a 2nd mortgage or HELOC
- h. Collateral Value (for unsecured loans leave blank)
- i. Provision Amount Provided by our Credit Union (if cell is left blank, Collateral Value calculation will be used)

Basic Data Requirements: SCALE

Credit Union provides to TCT on a quarterly basis:

- ✓ Individually identified loans

Remaining data is collected from CU NCUAs 5300 call report

WARM Method

- ❑ More precise allowance calculation
- ❑ Measures impact of credit score changes
- ❑ Supports proactive management of losses
- ❑ Early detection of deteriorating loans



- ❑ Requires more detailed data
- ❑ Requires more staff time for application

SCALE Method

- ❑ Simple data collections
- ❑ Simple ACL calculations
- ❑ Less complex for smaller Credit Unions



- ❑ Higher ACL for more complex CUs
- ❑ May inflate ACL requirement

Ask yourself these questions to determine *which* method works for you!

1. Does my loan management system provide core reports that can be used to populate credit migration analyses?
2. Does the credit union have adequate staffing to collect data and utilize the CM reports?

If your answers to these questions are yes – consider WARM, if they are no - consider SCALE

3. Is my loan portfolio more complex?
4. Is my loan to share ratio in the higher percentage range?
5. Would my credit union benefit from earlier detection of improving and deteriorating loans?

If your answers to these questions are yes – consider WARM, if they are no - consider SCALE

Policy Impacts

It will be imperative to edit your Allowance for Loan Loss policy so that it correctly reflects how your allowance is calculated. We recommend including the following aspects in your policy:

- Responsibility and oversight
- Details and applications of calculation methodology
 - ASC 450-20 Homogeneous pools
 - ASC 310-10 Individually Identified Loans
- Environmental Factors (Q&E)
- Participation loan pools
- Loan loss identification
- Summary of reports and outputs
- Regulatory references



CONTACT US WITH QUESTIONS

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