

# Wilary Winn University 2026: The Anatomy of a Defensible CECL Reserve



WILARY WINN

## Objectives & Resources

Session details, objectives, and reference materials

Participants will learn:

- Why many CECL frameworks struggle to explain reserve movement
- The structural elements of a defensible CECL framework
- How inputs, segmentation, assumptions, and model structure interact
- Why discounted cash flow preserves the drivers of credit loss

*Polling questions will be included throughout the session*

White Paper: [The Anatomy of a Defensible CECL Reserve](#)

## Agenda

### Building an Explainable and Defensible CECL Framework

- Why Many CECL Frameworks Struggle with Explainability
- The Four Pillars of a defensible Reserve
  - The Right Inputs
  - The Right Granularity
  - The Right Conditional Logic
  - The Right Structure
- Characteristics of a Defensible Reserve
- Key Takeaways & Questions

## CECL Implementation Today

The industry has moved beyond initial adoption

- CECL models are now embedded in quarterly reporting processes
- Methodologies, assumptions, and governance processes are documented
- Most institutions can produce an allowance estimate
- The challenge has shifted from implementation to explainability
- The key question is no longer “Can we calculate it?”
- The key question is “Can we explain why it changed?”

## The Real Test of CECL

Can management explain why the reserve changed?

- Reserve movement should be traceable to identifiable drivers
- Common drivers include:
  - Portfolio growth or contraction
  - Changes in borrower credit quality
  - Collateral value changes
  - Updated macroeconomic forecasts
  - Changes in prepayment, default, or severity expectations
- A defensible framework makes those drivers visible
- CECL should translate changing credit risk into explainable reserve movement

1. What is the most common challenge institutions face *after* implementing CECL?
  - a. Collecting loan data
  - b. Running the model
  - c. **Explaining the reserve movement**
  - d. Calculating historical loss rates



**WILARY WINN**

## When CECL Becomes Difficult to Explain

Governance weakens when model drivers are not visible

- Common warning signs:
  - Increasing reliance on qualitative overlays
  - Reserve movement disconnected from observable portfolio behavior
  - Difficulty explaining quarter-over-quarter changes
  - Broad explanations replacing driver-level analysis
  - Limited ability to isolate portfolio, credit, collateral, or macro effects
- The issue is usually structural design

## The Governance Test

Strong frameworks answer the right questions consistently

- A defensible CECL framework should answer:
  - What changed?
  - Why did it change?
  - How much did each driver contribute?
  - How sensitive is the reserve to changing conditions?
- Boards need clear reserve explanations
- Auditors need supportable assumptions and methodology
- Regulators expect reserve behavior to align with portfolio risk
- Governance depends on interpretability

## The Architecture of a Defensible Reserve

Four pillars determine whether CECL results can be explained

- **The right inputs:** what the model can see
- **The right granularity:** what the model can distinguish
- **The right conditional logic:** how the model responds
- **The right structure:** how the model explains loss
- These pillars must work together
- Weakness in one area reduces explainability across the framework
- Defensibility is a matter of architecture, not just documentation

## Pillar I: The Right Inputs

Inputs determine what the model can see

- Inputs are the foundation of reserve explainability
- Data volume is not the same as data quality
- The model must capture variables that actually drive credit performance
- Strong inputs connect portfolio changes to expected loss changes
- Weak inputs limit segmentation, assumptions, and reserve interpretation
- The goal is to have relevant data

## Key Drivers of Expected Loss

Strong inputs connect observable risk to expected loss

Key Inputs That Drive Expected Credit Loss		
Input Category	Examples of Variables	Why It Matters
Credit Quality	Credit score, internal risk rating, debt service coverage ratio, delinquency status	Indicates the borrower's ability and willingness to repay, directly influencing default probability.
Collateral Position	Loan-to-value ratio, updated property values, collateral type	Determines potential recovery in the event of default and influences borrower incentives.
Exposure Path	Loan balance, amortization schedule, remaining term, prepayment behavior	Defines how exposure evolves over time and the balance outstanding when losses occur.
Macroeconomic Conditions	Unemployment rate, housing price index, interest rates, sector conditions	Captures the economic environment that influences borrower performance and collateral values.

2. Which of the following is ***NOT*** a primary driver of expected credit loss?
- a. Credit quality
  - b. Collateral Position
  - c. **Branch location**
  - d. Macroeconomic conditions



**WILARY WINN**

## Common Input Problems

*Weak inputs limit the model's ability to explain results*

- Overreliance on broad historical averages
- Missing or incomplete credit attributes
- Stale collateral values
- Inconsistent risk ratings or credit scores
- Limited delinquency or migration data
- Macroeconomic inputs applied only through overlays
- Data fields captured but not meaningfully used
- Weak inputs create weak explanations
- Input issues flow through the entire CECL framework

## Pillar II: The Right Granularity

Granularity determines what the model can distinguish

- Strong inputs can lose value if loans are aggregated too broadly
- Segmentation preserves important risk differences
- Effective granularity helps identify:
  - Credit quality differences
  - Collateral strength differences
  - Product and term differences
  - Delinquency and vintage effects
  - Geographic or industry concentrations
- The goal is meaningful segmentation
- Not too broad, not unnecessarily complex

## The Aggregation Problem

Averages can hide the true shape of credit risk

- Broad pooling can make risk appear smoother than it is
- Strong borrowers and weak borrowers may receive the same assumption
- Portfolio averages can:
  - Overstate risk for safer loans
  - Understate risk for higher-risk loans
  - Delay recognition of credit migration
  - Weaken reserve explainability
- Aggregation is sometimes necessary
- Excessive aggregation creates blind spots

## Segmentation Failure Example

Broad averages can overstate safe loans and understate risky loans

What Happens When Risk Is Aggregated				
Example Portfolio Segment	Key Risk Attributes	True Loss	Aggregated Loss	Distortion
Prime	Credit Score > 760, LTV < 60%	0.10%	0.55%	Overstated
Standard	Credit Score 680 - 760, LTV 60% - 80%	0.35%	0.55%	Slightly Overstated
Higher Risk	Credit Score < 680, LTV > 80%	1.20%	0.55%	Understated

- The total reserve may appear reasonable while the risk distribution is distorted.

3. What is the primary risk of excessive portfolio aggregation?
- a. Increased model complexity
  - b. **Loss of meaningful risk distinctions**
  - c. Higher data storage requirements
  - d. Longer model runtimes



**WILARY WINN**

## Effective Segmentation

Risk sensitivity without false precision

- Effective segmentation should be:
  - Risk-relevant
  - Statistically supportable
  - Explainable
  - Governable
  - Stable over time
- Segments should reflect meaningful differences in expected loss
- Over-segmentation can create sparse data and volatility
- Under-segmentation can obscure credit risk
- Strong segmentation allows portfolio mix, credit migration, and collateral changes to flow through the reserve

## Pillar III: The Right Conditional Logic

Conditional logic determines how the model responds

- Conditional logic connects inputs to assumptions
- Assumptions should respond to observable risk drivers
- Key assumption categories:
  - Default
  - Severity
  - Prepayment
  - Recovery timing
- A model can have strong data and segmentation but still fail if assumptions remain static
- Conditional logic makes CECL forward-looking in substance
- The reserve should respond when risk changes

## Static Assumptions

Static assumptions limit reserve responsiveness and explainability

- Static assumptions apply the same behavior across broad loan groups
- Common examples:
  - One default rate for an entire pool
  - One severity assumption for a collateral group
  - One prepayment assumption across different borrower profiles
- Static assumptions may simplify calculation
- But they often fail to reflect changing risk
- Institutions may compensate with overlays
- Heavy overlay reliance can weaken governance and transparency

## Conditional Modeling

Assumptions should change when risk drivers change

Default assumptions vary by:

- Credit score
- Risk rating
- Delinquency status
- DSCR
- Economic conditions

Prepayment assumptions vary by:

- Rate incentive
- Loan age
- Product type
- Market conditions

Severity assumptions vary by:

- Loan-to-value ratio
- Collateral appreciation
- Collateral type
- Recovery costs

**Conditional modeling  
creates a clear link  
between changing risk  
and reserve movement**

## Conditional Assumption Example

Borrower characteristics should influence expected default behavior

How Conditional Assumptions Reflect Borrower Risk			
Borrower Profile	Key Risk Attributes	Economic Environment	Conditional Default Rate
Strong Borrower	Credit Score 780, LTV 60%	Stable Economy	0.40%
Strong Borrower	Credit Score 780, LTV 60%	Recession Scenario	0.90%
Higher-Risk Borrower	Credit Score 640, LTV 90%	Stable Economy	2.80%
Higher-Risk Borrower	Credit Score 640, LTV 90%	Recession Scenario	5.10%

- Conditional assumptions make risk differences visible inside the reserve calculation.

## Why Conditional Logic Matters

Responsiveness is essential to forward-looking CECL estimates

- Conditional logic allows the reserve to respond to:
  - Credit deterioration
  - Collateral value changes
  - Slower or faster prepayment behavior
  - Macroeconomic forecast changes
  - Portfolio mix shifts
- It reduces reliance on broad overlays
- It makes assumption behavior more transparent
- It supports stronger management discussion
- It improves auditability and governance

## Pillar IV: The Right Structure

Structure determines how expected loss is translated into allowance

- Credit loss forms over time
- Loans amortize, prepay, default, and recover
- Default timing affects exposure at loss
- Recovery timing affects present value
- A strong structure preserves these relationships
- A weak structure compresses them into broad averages
- Discounted cash flow modeling is powerful because it preserves the timing and sequence of expected loss

## Why Loss Timing Matters

The timing of default and recovery changes the reserve

- Expected loss depends on more than lifetime loss rate
- Timing matters because:
  - Loan balances amortize over time
  - Borrowers may prepay before default occurs
  - Defaults may occur early or late in the loan life
  - Recoveries may occur after delay
  - Collateral values may change before liquidation
- The same lifetime loss can produce different reserve outcomes
- DCF structure preserves the timing of exposure, default, severity, and recovery

## Discounted Cash Flow Framework

DCF organizes expected loss around loan-level economics

- Starts with contractual cash flows
- Adjusts for expected prepayment
- Applies expected default timing
- Applies loss severity assumptions
- Reflects liquidation and recovery timing
- Discounts expected shortfalls to present value
- Preserves the full expected loss path
- Allows management to isolate drivers of reserve movement
- Connects CECL to the economics of lending



# The Anatomy of a Defensible CECL Reserve

## Example DCF Schedule

Expected loss is a function of exposure, probability, severity, and time

Example DCF Schedule

Period	Remaining Balance	Performing Balance	New Defaults	Actual Amortization	Voluntary Prepayments	Actual Interest	Principal Recovery	Principal Loss	Loan Cash Flows
-	100,000,000	100,000,000							
1	92,113,113	92,029,395	83,718	7,573,022	313,865	333,054	-	-	8,219,941
2	84,176,475	84,099,430	77,045	7,566,100	286,820	306,508	66,974	16,744	8,226,402
3	76,280,332	76,209,926	70,406	7,559,184	259,913	280,097	61,636	15,409	8,160,830
4	68,424,507	68,360,706	63,801	7,552,275	233,144	253,820	56,325	14,081	8,095,564
5	60,608,823	60,551,593	57,230	7,545,373	206,511	227,678	51,041	12,760	8,030,602
6	52,833,103	52,782,410	50,692	7,538,476	180,014	201,670	45,784	11,446	7,965,944
7	45,097,172	45,052,984	44,188	7,531,586	153,653	175,794	40,554	10,138	7,901,587
8	37,400,855	37,363,138	37,717	7,524,702	127,427	150,051	35,351	8,838	7,837,530
9	29,743,979	29,712,699	31,280	7,517,824	101,335	124,440	30,174	7,543	7,773,772
10	22,126,369	22,101,495	24,875	7,510,953	75,377	98,959	25,024	6,256	7,710,313
11	14,547,855	14,529,352	18,503	7,504,088	49,552	73,610	19,900	4,975	7,647,150
12	7,008,263	6,996,099	12,164	7,497,229	23,860	48,391	14,802	3,701	7,584,282
13	5,857	-	5,857	6,990,242	-	23,301	9,731	2,433	7,023,274
14	-	-	-	-	-	-	4,686	1,171	4,686

Time To Liquidation	1 Month
Conditional Repayment Rate	4.00%
Conditional Default Rate	1.00%
Loss Severity	20.00%

Loan Rate	4.00%
Net Present Value of Cash Flows	99,882,984
Amortized Cost	100,000,000
<b>CECL Amount</b>	<b>117,016</b>

## Credit Loss Timeline

Expected loss develops through a sequence of credit events

### Current Exposure

- Starting balance at measurement date

### Default Timing

- Defaults occur at differing levels along exposure path

### Net Credit Loss

- Unrecovered exposure after recovery

### Scheduled Payments and Prepayments

- Exposure declines through amortization and payoff behavior

### Liquidation and Recovery

- Collateral, recovery costs, and timing determine net loss

### Present Value

- Cash flows are discounted back to measurement date using the note rate

4. Why is discounted cash flow modeling important in CECL?
- a. **It captures the timing of expected loss**
  - b. It simplifies calculations
  - c. It eliminates the need for assumptions
  - d. It avoids segmentation



**WILARY WINN**

## Characteristics of a Defensible Reserve

Strong reserves are explainable, responsive, decomposable, and governable

- **Explainable**
  - Management can describe why the reserve changed
- **Responsive**
  - Reserve changes when portfolio risk changes
- **Coherently Stable**
  - Movement is proportional and supportable
- **Decomposable**
  - Changes can be broken into meaningful drivers
- **Governable**
  - Boards, auditors, regulators, and management can understand and challenge the framework

Defensibility comes from structural integrity.

## Decomposing Reserve Movement

Reserve movement should be explained in meaningful pieces

Key components of reserve movement:

- Portfolio growth or contraction
- Portfolio mix shift
- Credit migration
- Collateral value changes
- Macroeconomic forecast updates
- Methodology or overlay updates

**A strong framework answers:**

- What changed?
- Why did it change?
- How much did each factor contribute?

## Key Takeaways

A reserve is only as defensible as the framework behind it

CECL is about determining reserves and explaining why they move

The Right Inputs

Inputs determine what the model can see.

DCF frameworks preserve exposure, timing, default, severity, recovery, and present value

The Right Granularity

Granularity determines what the model can distinguish.

Defensible reserves are explainable, responsive, decomposable, and governable

The Right Conditional Logic

Conditional logic determines how the model responds.

The Right Structure

Structure determines how the model explains.

## Questions & Discussion

Applying the framework to real CECL governance challenges

- Where is reserve movement easiest to explain?
- Where does explanation become more difficult?
- Are reserve changes tied to identifiable drivers?
- Does the framework distinguish portfolio growth from risk deterioration?
- Are overlays supplementing the model or compensating for structural gaps?
- How clearly can management explain results?



**Questions?**

*Thank You*



**MIKE TESSIER**

Director | Wilary Winn

952-444-6646

[mtessier@wilwinn.com](mailto:mtessier@wilwinn.com)

[www.wilwinn.com](http://www.wilwinn.com)