

CURRENT WRITE-OFF RATES AND Q-FACTORS IN ROLL-RATE METHOD

Perspective of CECL

CECL FOUNDATION

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By **Vinayak Shetty**



marcus.cree@greenpointglobal.com | sanjay@greenpointglobal.com

International Corporate Center, 555 Theodore Fremd Avenue, Suite A102 Rye, NY 10580

THE CECL STANDARD

Recognizing the limitations the US Generally Accepted Accounting Principles (GAAP) faced while calculating impairment losses on financial assets, the Financial Accounting Standards Board (FASB) issued the Accounting Standards Updates (ASU) 2016-13 to change its guidance regarding impairment of financial instruments. Also, the ASU introduced the current expected credit loss (CECL) model, which focuses on expected losses rather than incurred losses.

The CECL model aims to:

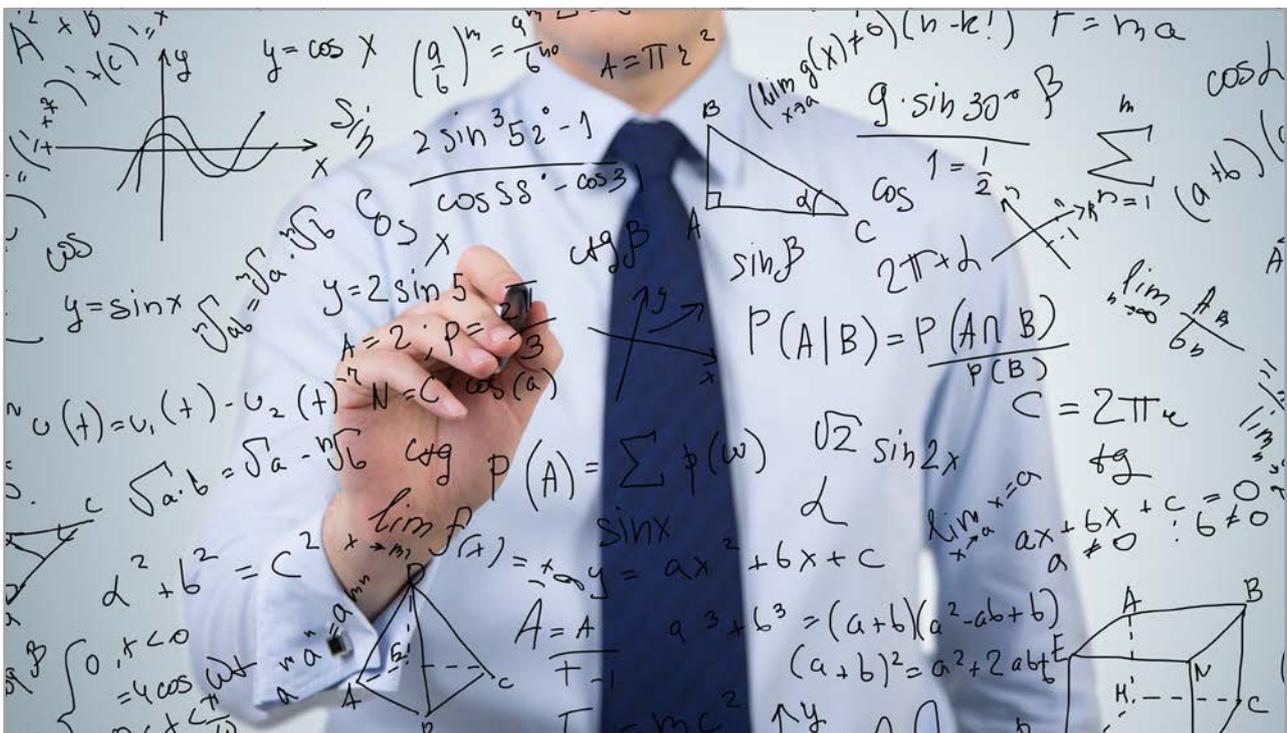
1. Reduce the number of credit impairment models that financial institutions use
2. Require banks and credit unions to recognize an allowance of lifetime expected credit losses

3. Use an expected loss model instead of an incurred loss model to remove any barriers to timely recognition of credit losses

Roll-rate method: A convenient way to measure expected credit losses

Under the CECL standard, there are several measurement approaches that financial institutions can use to estimate expected credit losses. Popular among these is the Roll-rate method, which uses historical trends in credit write-offs and delinquency. Historical roll rates are used to predict ultimate losses.

Historical experience may not accurately reflect an institution's expectations for the future. Hence, institutions can add qualitative information to historical loss data as needed to reflect the current situation and generate projections that may not be fully captured by historical loss data alone. These qualitative factors are more popularly known as Q-factors. Q-factors are specific local area economic adjustments and reflect local conditions.



Q-factors and their relevance under CECL

Q-factors are almost exclusively local economic drivers that change the expected loss away from national or peer group averages. A few Q-factors that can play an important part in CECL calculations are:

1. Lending policy procedures
2. Credit concentrations
3. Problematic loan trends
4. Collateral value

The Roll-rate method for estimating losses is calculated based on recovery rates and Q-factors. It is popular with banks since the data needed to drive those calculations is readily available at the pool level in the Q-report. This method is also popular because roll rate is basically the recognisable loss rate adjusted for the economic conditions to get the forward rate.

Bank reported rates and their usability

1. Banks can use annualized loss rates and then project forward what one-year losses can be. Usually, annual rates for the last five years are taken, with loss rates for the last quarter factored in to get the annualized rate.
2. Sometimes the call report from a bank or a credit union mentions zero losses. This can derail CECL calculations and their accuracy. We need to start thinking of ways about how

the last quarter will not influence the results. That is why it is preferable to average the previous five loss rates.

3. If a bank or credit union chooses, it can use the peer group loss rate published by the National Credit Union Administration (NCUA) and the Federal Financial Institutions Examination Council (FFIEC). If a bank's loss rate is far below the peer group loss rate, the bank examiner may expect it to use the peer group loss rate. If expected loss calculations are very low, it becomes harder to defend them in front of auditors.
4. Banks can also use a default rate at the pool or bank level as it can be better defended during audits. This is typically the case when rates are being revised upwards, following a period of unusually low delinquency.

Allowance for credit losses calculations and audit considerations

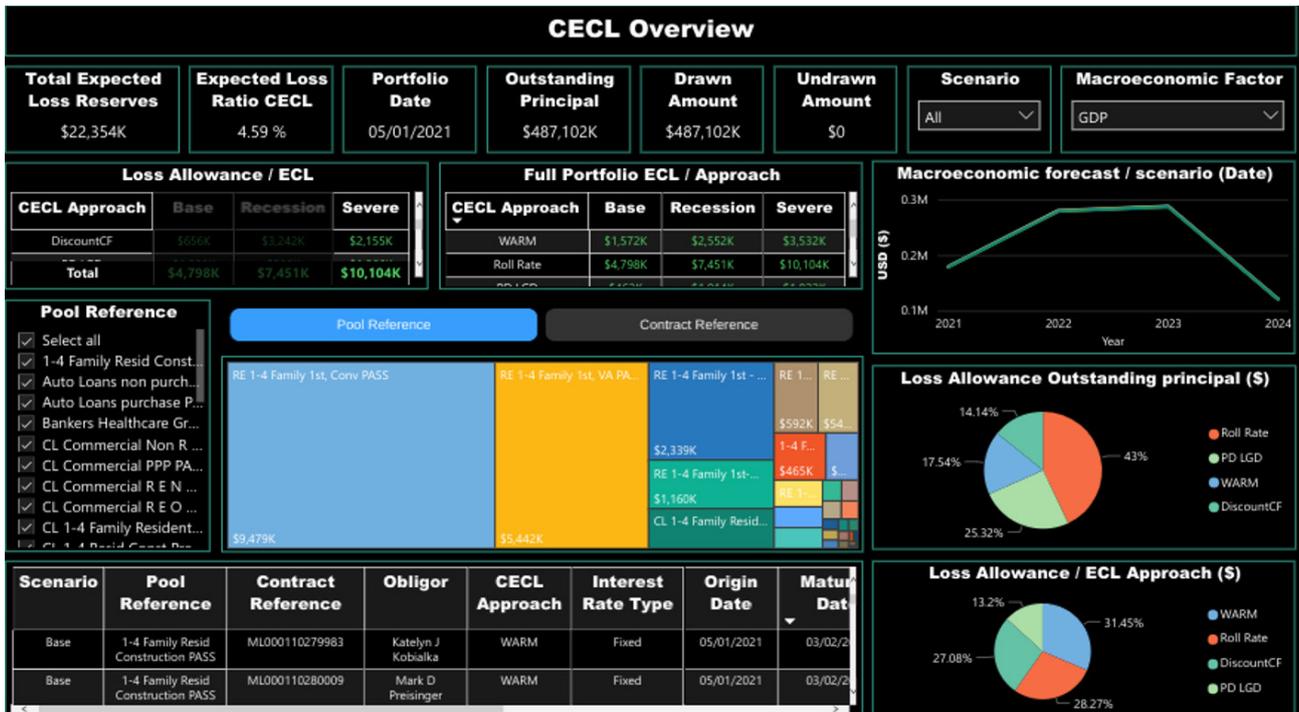
While using the Roll-rate method, if the loss rates are deduced at the bank level, the amount of data needed to defend that rate during audits will be that much higher. Conversely, if the roll rate calculations are done at the peer group level, and we use the averages and macros as they come out, the amount of data to defend the results will be that much lower as the data used is from a reliable third party such as the FFIEC. It is also data that is available and recognized.

CECL Express can help...

CECL Express is a turnkey solution that fully satisfies all elements of the new CECL accounting standard. The system provides all non-loan data, including:

- Yield curves and Fed data
- Linked reports on losses from the FFIEC and NCUA
- PD and LGD curves
- Macroeconomic data
- Vintage
- Roll Rate
- Discounted Cashflow
- WARM
- PD/LGD

Banks and credit unions need to only provide the underlying loan details for the system to provide fully auditable ECL results for multiple calculation methods, including:



CECL Express provides more than valid ECL results. The system computes results for all methods and all loan pools, allowing the bank to optimize its CECL configuration and avoid the worst impacts of the new standard.

Visit ceclexpress.com for more information about the most efficient route to optimal CECL compliance.



ABOUT CECL EXPRESS

- › CECL Express is a turnkey, cloud-based solution, designed to provide banks and credit unions with optimized results and reporting that fully meet the 'Current Expected Credit Loss' accounting standards.
- › CECL represents a major change in what is expected from financial institutions in their reporting of, and provisioning against potential credit losses.
- › Smaller financial institutions are expected to implement forward-looking credit models to estimate losses they may experience.
- › Selecting inappropriate 'Expected Credit Loss' (ECL) models will create a need to hold far more capital than is required, directly causing a loss of Profit and Loss (P&L). Data used within these models must also be reported for audit purposes.
- › January 2023 will see the first official reporting period for the beginning of CECL. Banks and credit unions must have a framework in place, which is fully tested and reports results based on that data. In practice, this means selecting, implementing, and testing the system in the first half of 2022.
- › For Finastra core systems, the integration has already been built. For customers with these systems, their CECL results are ready to be calculated and reported.



ABOUT GREENPOINT FINANCIAL

- › GreenPoint Financial is a division of GreenPoint Global, which provides software-enabled services, content, process and technology services, to financial institutions and related industry segments.
- › GreenPoint is partnering with Finastra across multiple technology and services platforms.
- › Founded in 2006, GreenPoint has grown to over 500 employees with a global footprint. Our production and management teams are in the US, India, and Israel with access to subject matter experts.
- › GreenPoint has a stable client base that ranges from small and medium-sized organizations to Fortune 1000 companies worldwide. We serve our clients through our deep resource pool of subject matter experts and process specialists across several domains.
- › As an ISO certified company by TÜV Nord, GreenPoint rigorously complies with ISO 9001:2015, ISO 27001:2013, and ISO 27701:2019 standards.



Marcus Cree

MANAGING DIRECTOR AND
HEAD OF FINANCIAL TECHNOLOGY AND SERVICES

Marcus has spent 25 years in financial risk management, working on both the buy and sell side of the industry. He has also worked on risk management projects in over 50 countries, gaining a unique perspective on the nuances and differences across regulatory regimes around the world.

As Managing Director, Marcus heads GreenPoint Financial Technology and Services and has been central in the initial design of GreenPoint products in the loan book risk area, including CECL and sustainability risk. This follows his extensive experience in the Finastra Risk Practice and as US Head of Risk Solutions for FIS. Marcus has also been a prolific conference speaker and writer on risk management, principally market, credit and liquidity risk. More recently, he has written and published papers on sustainability and green finance.

Marcus graduated from Leicester University in the UK, after studying Pure Mathematics, Psychology and Astronomy. Since graduation, Marcus has continually gained risk specific qualifications including the FRM (GARP's Financial Risk Manager) and the SCR (GARP's Sustainability and Climate Risk). Marcus's latest academic initiative is creating and teaching a course on Green Finance and Risk Management at NYU Tandon School of Engineering.



Sanjay Sharma, PhD

FOUNDER AND CHAIRMAN

Sanjay provides strategic and tactical guidance to GreenPoint senior management and serves as client ombudsman. His career in the financial services industry spans three decades during which he has held investment banking and C-level risk management positions at Royal Bank of Canada (RBC) Goldman Sachs, Merrill Lynch, Citigroup, Moody's, and Natixis. Sanjay is the author of "Risk Transparency" (Risk Books, 2013), Data Privacy and GDPR Handbook (Wiley, 2019), and co-author of "The Fundamental Review of Trading Book (or FRTB) - Impact and Implementation" (Risk Books, 2018).

Sanjay was the Founding Director of the RBC/Hass Fellowship Program at the University of California at Berkeley and has served as an advisor and a member of the Board of Directors of UPS Capital (a Division of UPS). He has also served on the Global Board of Directors for Professional Risk International Association (PRMIA).

Sanjay holds a PhD in Finance and International Business from New York University and an MBA from the Wharton School of Business and has undergraduate degrees in Physics and Marine Engineering. As well as being a regular speaker at conferences, Sanjay actively teaches postgraduate level courses in business and quantitative finance at EDHEC (NICE, France), Fordham, and Columbia Universities.