Expected Credit Loss Approach – Modeling Challenges

Stephen G. Ryan
Stern School of Business, New York University
October 18, 2018

Overview of Remarks

- Prefatory comments about differences between the incurred loss model (ILM) and the current expected credit loss (CECL) approaches to loan loss provisioning
- Procyclical effects of CECL
 - At loan inception
 - After loan inception
 and possible solutions
- Most plausible good and bad scenarios for implementation of CECL
- Bonus slides (won't cover):
 - Issues raised by relevant academic research
 - Practical issue for unconditionally cancelable lines of credit

Prefatory Comments

- I will primarily talk about conceptual issues based on my experience with US GAAP and banks
- Compared to the ILM approach in current US GAAP, when effective in 2020 the CECL approach will
 - Eliminate the ILM's probable condition
 - Broaden the ILM's incurred and can be reasonably estimated conditions
 - Expand the set of loans for which banks provision for credit losses over the entire remaining life of the loans
 - "Reasonable and supportable" forecasts
- The IFRS CECL approach has elements of both the ILM and CECL in US GAAP

Prefatory Comments (2)

- The effect of CECL will be greater for homogeneous loan types than for heterogeneous loan types because the ILM's probable and can be reasonably estimated conditions are met at inception for homogeneous loans
- Compared to the ILM, CECL will yield procyclicality-related incentive issues for both banks and bank regulators primarily in bad times

Effects of CECL at Loan Inception

- At loan inception, banks will record significant incremental provisions for loan losses
 - While this is true both in good times and bad times, banks will be less willing and able to record these provisions and thus to lend in bad times than in good times. Hence, bank regulators will have incentives to induce banks to lend in bad times
 - The underlying problem is that CECL yields worse matching of provisions to interest revenue over the life of loans than does the ILM

Solution to at Loan Inception Effects

- Procyclical at loan inception effects could be entirely eliminated while retaining the CECL approach by
 - Recording net loans equal to the amount lent at loan inception
 - Net loans = gross loans allowance for loan losses
 - Using an effective interest rate that equates the amount lent to the present value of the expected, not promised, loan payments
 - Adjusting income and owners equity (and thus regulatory capital) during a period only for
 - Interest revenue, which is reduced by a portion of <u>expected</u> credit losses, and
 - <u>Unexpected</u> credit losses
 - Regulators would need to set loan risk weights and required capital ratios at levels sufficient to cover the portion of expected credit losses on loans not yet captured in interest revenue
 - Both the IASB and FASB have rejected this approach, however

Effects of CECL After Loan Inception

- CECL's requirement that banks provide for credit losses on an expanded set of loans over their remaining lives will be procyclical in bad times unless the effect of this requirement is dominated by banks' ability to generate reasonable and supportable forecasts of cycle improvement in bad times
 - There is no evidence of which I am aware that banks (or other parties) have this ability over periods of appreciable length
 - The neutrality concept of financial reporting likely will diverge from bank regulators' incentives to (appear to) maintain financial stability
 - Do not conflate CECL with dynamic loss reserving

Solution to After Loan Initiation Effects

- Not clear there are any good ones, but I recommend
 - Don't mess opaquely with the accounting
 - Better to systematically or in another transparent fashion
 - Modify loan risk weights or required regulatory capital ratios across the cycle or
 - Inject capital into banks as early as feasible in bad times

Most Plausible Good and Bad CECL Implementation Scenarios

- Good scenario: CECL induces banks to improve their credit risk modeling personnel and systems sufficiently to respond somewhat more quickly when cracks appear in the business or credit cycle
 - "The proof is in the pudding"
- <u>Bad scenario</u>: CECL leads banks to reduce lending and/or take other procyclical actions in bad times, leading to regulatory forbearance
 - Impose ex ante restrictions on regulatory forbearance (a la FDICI Act of 1991 in US)?

Bonus Slide: Academic Research

- Research finds that banks that chose to record timely provisions for loan losses under the ILM also tended to make good risk management decisions that reduced procyclicality (e.g., Beatty and Liao [2011], Bushman and Williams [2012, 2015])
- Question is whether these findings are causal and thus likely to extend to timelier provisioning by other banks under CECL
 - Reasons results might be causal/extend to other banks under CECL: timelier provisioning reduces banks' regulatory capital and/or reflects better credit risk modeling by banks
 - Reasons results might not be causal/extend to other banks under <u>CEC</u>L: better managements record timelier provisions and have better risk management

Bonus Slide: Practical Issue for Unconditionally Cancelable Lines of Credit

- CECL does not allow reserving for he unfunded portions of unconditionally cancelable lines of credit (credit cards, HELOCs), even though banks generally cancel these lines well after borrower creditworthiness has deteriorated
- Hence, regulators can't rely on CECL to capture any of banks' expected credit losses for these lines of credit