July 13, 2016

# *Weekly Post*: Credit Loss: THC CECL Solution

Dear Clients-

The FASB regulations on Current Expected Credit Loss (CECL) were published on June 16, 2016. Bank regulators have described CECL as the "biggest change to bank accounting ever."

The CECL accounting treatment will affect both the balance sheet capital and reported income. Since the credit loss provision is determined by the present value of the cumulative expected losses over the life of a loan, CECL is indeed the economic value of the expected losses, analogous to the Economic Value of Equity.

The key implications on asset-liability management are:

- Capital and Net income will be more volatile
- Interest rate risk can affect the loss provision and NII, and therefore banks cannot manage interest rate and credit risk separately.

For these reasons, American Bankers' Association (ABA) *CECL Backgrounder* indicated that CECL will be an essential part of ALM and will change your ALM process, origination and pricing of loans.

You should initiate the process of evaluating and understanding the implications on your institution sooner rather than later. The purpose of this Post is to explain "why."

**Challenges**

- How does CECL affect the volatility of my earnings?
- How can a rise in the current interest rate affect CECL, hence earnings and capital?
- How does CECL affect pricing of my loans?

**Market Wisdom - Art Hilliard***

Strategies in selective acquisition of loans with certain characteristics can minimize minimize earnings' volatility exposure

- Higher WACs
- Higher FICOs
- Lower LTVs
- Seasoned loans

TFO provides a vehicle for you to:

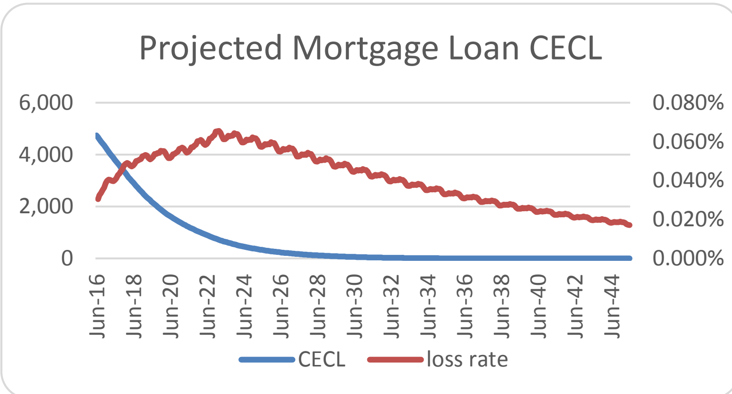
- Put your buy inquiries (axes) on the system
- Your axes are matched up with loans currently on the system. Giving you acces to inventory without having to go out to the market.
- Other selling institutions will also be able to see your axe and respond accordingly
- All interaction is anonomous until a bid is acepted and a letter of intent is issued.

TFO is here as a tool to help you manage your asset quality and earnings. It is free to get and there is no risk in exploring how TFO can help you.

Art Hilliard has been in the mortgage industry for 29 years. He has originated, managed secondary marketing, securitizations and settlements, provided mortgage financial advisory and performed multiple mortgage portfolio sales and acquisitions.He was past president of the Illinois Mortgage Bankers Association.

**Solution**

ABA highlighted that when rates rise, loan prepayment speeds will slow resulting in an increase in the life-of-loan credit loss. To illustrate, let me consider a 30 year fixed-rate mortgage loan, $250,000 balance, 4.5% rate, LTV 75, FICO 720 and age 12 months. I projected CECL and the projected monthly loss rate over the life of the loan based on THC model. The results show that the CECL is $4,740 and the average annual credit loss rate is 0.48%, and CECL would increase by $4,740 at the time of the loan purchase. Given no other changes in the expected losses, you would book the change in CECL into income and it will be a negative credit loss provision. My projection shows that the CECL would drop by $931, which would be reported as income, ignoring prepayment and amortization for clarity of exposition.




Note that the loss rate is not constant; the projected loss rate initially increases as the loan goes through the seasoning period. Then the expected credit loss rate falls gradually after peaking in the eighth year. Therefore, CECL cannot be calculated using overly simplified model.

Some models suggest that CECL can be determined using the Weighted Average Life (WAL) of the loan based on the average loss rate, instead of using the life of the loan with the time dependent loss rate. But the methodology only approximates the credit loss provision. Using this WAL approach, the CECL is calculated to be $4,997, significantly higher than the actual CECL calculated, as reported above.

Using this example, I now show how interest rate risk impacts CECL. When interest rates are shocked up by 100 bpts, the prepayment speed slows down resulting in the CECL increases, lowerinig earnings and capital. My calculation shows that the CECL under this rate shock scenario is $5,806, a 22% increase. The table below summarizes the results.

| Scenarios | CECL | % change | Comments |
|---|---|---|---|
| Base case | $4,740 | NA | |
| 100 bpt up shock | $5,806 | Increase by 22% | Interest rate risk impact |
| Calculated by WAL | $4,997 | Variance of 5.4% | WAL approach approximation |

In this example, I have illustrated that CECL can induce volatility to your capital and earnings.

**Numerical Example**

I will now describe the EaR reports based on CECL using the same loan as describe above. In the sample EaR report below, assuming the loan is projected on a run off basis and no charge off in the first five months. The table below show that the profits before taxes are higher than the NIIs, due to the negative credit loss provision, as explained above.

| DATE | Jun-16 | Jul-16 | Aug-16 | Sep-16 | Oct-16 | Nov-16 |
|---|---|---|---|---|---|---|
| **Scenario:Base Case** | | | | | | |
| **ASSETS INTEREST INCOME** | | 95 | 93 | 91 | 89 | 87 |
| **LIABILITIES INTEREST COST** | | 0 | 0 | 0 | 0 | 0 |
| **NET INTEREST INCOME** | | 95 | 93 | 91 | 89 | 87 |
| *Non Interest Expense(income)* | | 4 | 4 | 4 | 4 | 4 |
| *Provision of losses* | | -7 | -8 | -8 | -8 | -8 |
| *Profit before taxes* | | 98 | 96 | 94 | 93 | 91 |

**Conclusions**

The CECL accounting treatment of credit risk is going to significantly impact your current asset-liability management process. THC can assist you by helping you better understand how to formulate an efficient balance sheet strategy to which minimizes your potential earnings volatility induced by the new credit regulations.

*If you have any questions regarding your CECL implementation, please do not hesitate to contact THC.*

Regards,
Tom Ho
Tom.ho@thomasho.com
1-212-732-2878

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*Art Hilliard is the Principal at AJHilliard Company assisting banks, credit unions, and mortgage companies with mortgage advisory and asset sales and acquisitions.