July 20, 2016

Weekly Post: Current Expected Credit Loss (CECL) Preliminary Estimates

Dear Clients-

American Bankers' Association (ABA) *CECL Backgrounder June 2016* indicates that CECL will be an essential part of ALM and "the new standard represents the most sweeping change to bank accounting ever." However, the initial estimates of the impact of CECL on capital adequacy vary significantly. OCC estimated CECL would increase the capital requirement by 30%, while KBW estimated the increase for small and medium banks by only 3%. ABA concludes that the estimated change is unknown.

Meanwhile, there is urgency to understand the impact of CECL on the balance sheet now. The reasons are:

- Most loans that you originate now will be affected by the CECL treatment in 2020.
- Fannie and Freddie LLPA pricing will likely be changed based on CECL before the FASB effective date.
- The anticipated effect of CECL on your capital, earnings levels, and volatilities canbe significant
- This significant change in accounting treatment may offer profitable opportunities.

The purpose of this Post is to provide you some estimates of the CECL impact on your balance sheet to assist you in implementing CECL, showing how the estimates can be derived.

Challenges

- Should I continue to originate fixed rate mortgages without charging for the CECL cost?
- Which product's profitability would be significantly affected by CECL?
- How does CECL indirectly affect my interest rate risk and earnings?

Market Wisdom - Art Hilliard*

Here are a couple of conventional scratch and dent loans currently out for bid. These are clean loans:

- 30 yr Fixed
- Conforming size
- Performing
- WAC 5.125
- WA LTV 65
- WA FICO 786
- WA DTI 35.6

These loans are hitting on all cylinders.

- Great yields, low LTVs, good FICOs and low debt to income ratios
- Geograhically located in the tri-state area
- Current bids are coming in at high 90s, but I think the pool will trade above par

This is a great pool on which to cut one's teeth. Take a look.

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

CECL reported as loss provision will affect your reported capital and earnings. Further, CECL will be "dynamic," revised as the expected credit loss changes. Consider residential mortgages loans to illustrate. There are many risk drivers.

- Credit measures such as FICO and LTV, which may change over time with the former affected by the borrowers' credit and the latter by the home values.

- Interest rate levels affect the prepayment speed, which in turn affects the expected credit loss over the life of the loan
- Economic conditions that can affect the recovery rate or the Loss Given Default (LGD).

Using THC data, the table below provides the THC preliminary estimates of CECL by product types using industry averages. I need to emphasize that your CECL will be institutional specific in part based on your historical loss rate and your economic forecast. A sample of the results is presented below.

	rate(%)	WAL	eff.dur	long term(annualized)		
				CPR(%)	Net Loss(%)	CECL(%)
FRM 30 FICO 720 LTV 75	3.5	7.91	6.23	6.17	0.49	2.5%
FRM 20 FICO 720 LTV 75	2.9	7	6.04	4.8	0.54	2.4%
FRM 15 FICO 720 LTV 75	2.8	5.09	4.6	8.17	0.47	1.1%
FRM 10 FICO 720 LTV 75	2.7	4.02	3.74	7.4	0.43	0.8%
FRM Balloon FICO 720 LTV 75	2.75	5.39	4.94	4.12	0.48	1.7%
ARM Monthly Reset	3.35	7.44	0.1	5.04	0.83	4.3%
ARM Semiannual Reset	3.35	7.12	0.31	5.7	0.84	4.1%
ARM Annual Reset	3.35	6.63	0.78	6.82	0.85	3.8%
ARM 3 Years Reset	3.45	7.24	2.18	5.36	0.84	4.2%
ARM 5 Years Reset	3.45	7.21	3.32	5.54	0.84	4.1%
ARM 3/1	3.45	5.73	2.2	9.84	1.15	3.7%
ARM 5/1	3.45	3.64	2.86	18.71	1.18	2.6%
ARM 7/1	3.45	3.61	3.17	19.81	0.86	1.1%
CRE Amortization Fixed	4.5	4.09	3.47	15.11	0.59	1.6%
CRE Amortization Adj Rate	4	4.06	0.82	15.11	0.59	1.6%
CRE Balloon Fixed	4.5	5.04	4.13	15.02	0.59	1.9%
CRE Balloon Adj Rate	4	5	0.8	15.03	0.59	2.0%
Farmland Fixed	3.5	5.91	4.93	10.06	0.39	1.2%
Farmland Adj Rate	3.5	5.91	0.27	10.06	0.39	1.1%
2nd Mortgage Fixed	5	4.53	3.79	15.05	1.37	3.2%
2nd Mortgage Adj Rate	4.5	4.5	0.26	15.05	1.37	3.2%
Direct New Auto	3.63	2.02	1.88	15.59	0.26	0.3%
Direct Pre-Owned Auto	4.68	2.03	1.86	15.58	0.27	0.3%
Indirect New Auto	3.95	2.02	1.88	15.58	0.37	0.5%
Indirect Pre-Owned Auto	4.62	2.02	1.86	15.58	0.63	0.8%
New Motorcycle	5.19	1.97	1.78	15.58	0.26	0.3%
Pre-Owned Motorcycle	5.07	1.97	1.79	15.58	0.26	0.3%
New Recreational Equipment	6.58	1.95	1.75	15.57	1	1.1%
Pre-Owned Recreational Equipment	6.89	1.95	1.74	15.57	1	1.1%
New Boat	6.24	1.97	1.75	15.58	0.26	0.3%
Pre-Owned Boat	6.75	1.97	1.73	15.58	0.26	0.3%
New Motorhome	6.32	1.95	1.75	15.57	1	1.1%
Pre-Owned Motorhome	6.83	1.95	1.74	15.57	1	1.1%

Credit Card	12.5	1	0	0	2	0.5%
C/E Personal Loan	9.5	1	1	11	2	0.8%

CPR is the annualized conditional prepayment rate. CPR 6% means that the probabiity of the loan expected to be prepaid is 6%, or equivalently, 6% of a large portfolio of such loans is expected to paydown annually. The THC prepayment-default model takes many factors into account. CPR is only a summary statistic that I use here for clarity of exposition. CECL is reported as a % of the outstanding balance. All loans are assumed to be recently originated and are priced at par.

The result shows that the WAL has a significant effect on CECL. 2nd mortgages and CRE balloon also have high CECL. Note that CECL will be adjusted dynamically. And therefore the sensitivity of CECL to the risk drivers mentioned earlier should also be analyzed.

Numerical Example

Banks on average hold about 73.5% of the total assets in loans and the ALLL is 1.23% of loan outstanding balance. Assume the loan portfolio sector allocation is that described below based on industry averages. The Table below shows that the CECL to the loan value and to the total assets are 1.7% and 1.27% respectively.

	Loan Ratio*	CECL
Single Family FRM	12.4%	2.0%
Single Family ARM	6.7%	2.8%
HELOC	4.7%	3.2%
CRE & Multifamily	21.1%	1.7%
Commerical Loan	23.1%	1.7%
Auto Loan	4.5%	0.3%
Credit Card	7.7%	0.5%
Personal Loan	2.6%	0.8%
Other Loan	17.3%	1.7%
Total	100.0%	**1.7%**

Loan (% of total asset)*	73.5%
ALLL (% of total loan)%	1.23%
ALLL (% of total asset)*	0.90%
CECL (% of total asset)	**1.27%**

*note: based on the all the banks data as of 6/29/2016

Therefore the increase of loss allowance under CECL is 0.37% (= 1.27% - 0.90%) of the total asset. The average Tier 1 capital of all banks as of 3/31/2016 is 10.93%. Then the bank Tier 1 capital would decrease from 10.93% to 10.56%. I should emphasize that the impact on the capital ratio depends significantly on the loan portfolio composition. Community banks holding more 1-4 family mortgages or credit unions holding more consumer loans will have a higher impact on the capital requirement.

The above estimation illustrates how CECL may affect your ALM strategies, some of which I will discuss below

- The capital ratio will be dependent on multiple market factors that you cannot control. Therefore, you may need to increase your capital ratio to manage your capital risk
- CECL is much higher for 30 year fixed rate mortgage loans as opposed to 15 year loans. And yet, LLPA is quite indifferent between the two loan types. This variance should affect your loan pricing and on and your decision between deciding to hold the loans on the balance sheet or sell the loans to investors.
- CECL is interest rate sensitive, and you need consider CECL as part of your ALCO discussion.
- Since CECL is reported at the time of loan origination instead of a less credit exposure number such as 1% of the balance, the details of the risk drivers of the expected credit loss over the life of the loan has to be part of the loan pricing, either regarding rate or price.

These are just some of the ALM strategies that may be affected by the introduction of CECL. Incorporating CECL in your ALM process now will empower you to manage your balance sheet more holistically and dynamically moving forward. The changes and adjustments you make now will increase your chances to exploit market opportunities as the banking industry seeks to adjust to this “most sweeping change to bank accounting ever."

Conclusions

The CECL accounting treatment of credit risk is going to impact your current asset-liability management process significantly. Implementing your CECL now will enable you to exploit market opportunities as the banking industry adjusts to this significant change in bank accounting.

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

Regards,
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