Z-CONCEPTS

CECL: The First Question(s) is Always About the Data

by Tom Caragher, Director, Product Management, ZM Financial Systems

As has been discussed a lot over the past couple of years, a critical component of meeting the CECL mandate is data. Questions abound, and in trying to answer data requirements, discussions often lead to even more questions. When discussing CECL with clients the most common questions asked include: What data points do we need to gather? How much history or how far back do we need to go? Where can we get it? How and where can we store and access this data? While answering questions with questions can be frustrating at times, when we look at the process to prepare for CECL these additional questions can be enlightening.

When building or developing anything that is new to an organization, it is critical to keep in mind the whole picture. What is the expected end result? If we only look at the individual parts and build those without an eye on the complete picture, we may get to the end and only have individual parts. These individual parts may look nice however may be less impactful to the overall goal. By asking the secondary questions, it forces us to think further down the road and see how each piece fits with the whole.

WHAT DATA POINTS DO WE NEED TO GATHER?

This is one of the most frequently asked questions. The response people want is a definitive list. CECL has created a lot of experts and the opinions of those experts can vary. We've heard some say only about 20 fields are needed and we've heard others who have said 120. The real answer is: it depends. In reality, the number of fields an institution will need will be somewhere in-between those two numbers. Now, keep in mind, we'll always say more is better. Get everything you can and more, because there is a lot you can do with the data.

Unfortunately, for many, this is not a realistic starting point. It may be something to aspire to and get there by continuously adding fields as you go.
To better answer this question, ask these questions:

- What methodology or methodologies do we want to use?
- How do we want to pool or segment the portfolios?
- Have we thought about reporting?

If you think about the data points in the context of those three questions, you'll get to a more meaningful list for your institution.

What loss rate method(s) do you want to use? FASB allows for any method as long as it can reflect a life of loan loss experience. The methods most frequently discussed are: Historic Loss Rate or Snapshot, Vintage, Remaining Maturity, PD/LGD, and Discounted Cash Flows (DCF). See Figure 1. While there are some other variations, those listed are the most commonly discussed. The methods above vary in complexity. Which one(s) we use can be a matter of preference. We'll leave a more detailed discussion of them for a subsequent edition. For now, think about what each method might need as inputs.

There will be inputs which will be common across all of them, while others may not. For example, some will use the origination date and others will not. Methods that call for calculating behavior adjusted cash flows will need data points used in the Asset/Liability Management (ALM) process, whereas less complex methods won't need that level of detail.

How do we want to pool/segment the portfolios? There are a lot of institutions, at least initially, who will segment at the portfolio level only. While this may meet the mandate, does it provide valuable information? How can we segment the portfolios in a way that may help us minimize the effect on the reserve? Or, provide better insight into the balance sheet, helping make us more competitive and profitable? Consider flexibility of segmentation and what data points can help achieve it. Segmenting such as Entity/Portfolio/Cost Center/Loan Officer/Credit Rating can provide better information than just Entity/Portfolio.

What data points do we need for reporting? Are there data points needed for some reports though not needed for the chosen method or segmentation? We may choose not to segment by

	PD/LGD										Scenario:	Baseline
	Current Balance 7/31/18	Prior Balance 5/31/18	Current PD 7/31/18	Prior PD 5/31/18	Current LGD 7/31/18	Prior LGD 5/31/18	Total Reserve Current 7/31/18	Total Reserve Prior 5/31/18	Total Reserve Change $	Total Reserve Change %	% of Total Reserve Current	% of Total Reserve Prior
Auto Bank Loan	2,160,000	2,560,000	3.56%	3.59%	46.00%	46.00%	35,397	42,276	6,879	16.27%	1.86%	2.22%
Auto Bank Lease	2,350,000	2,297,500	5.06%	5.03%	20.00%	20.00%	23,777	23,113	(664)	(2.87%)	1.25%	1.21%
Bankcard	3,162,500	3,102,500	7.70%	7.40%	84.00%	84.00%	204,512	192,851	(11,660)	(6.05%)	10.75%	10.13%
Consumer Finance Installment	3,400,000	3,285,000	6.35%	6.15%	73.00%	73.00%	157,698	147,480	(10,218)	(6.93%)	8.29%	7.75%
First Mortgage	4,317,500	4,277,000	5.56%	5.63%	40.00%	40.00%	96,025	96,318	293	0.30%	5.05%	5.06%
HELOC	4,450,000	4,365,000	0.97%	0.89%	81.00%	81.00%	35,120	31,467	(3,653)	(11.61%)	1.85%	1.65%
Student Loan	4,950,000	4,837,000	12.45%	12.67%	73.00%	73.00%	449,727	447,379	(2,348)	(0.52%)	23.63%	23.51%
Retail Card	5,450,000	5,225,000	15.62%	15.55%	88.00%	88.00%	749,227	714,989	(34,238)	(4.79%)	39.37%	37.57%
Other	5,950,000	5,897,000	3.92%	4.01%	65.00%	65.00%	151,605	153,705	2,100	1.37%	7.97%	8.08%
Total	36,190,000	36,190,000					1,903,089	1,903,089	(53,510)	(2.81%)		

Figure 1: Using the PD/LGD methodology and segmenting by portfolio we see each impacts the reserve and changes over time.

credit rating. Ask the additional questions, for example: is it needed for those subject to the Vintage Disclosure report? Ask your auditor what they want to see. See Figure 2.

to your auditor now. Ask them if that is okay and see if you can "box in" an interpretation.
The former, seven- to-10 years is based on the length of the portfolio.

	Amortized Cost Basis by Origination Year							
	2018	2017	2016	2015	2014	Prior	Revolving Loan Amortized Cost Basis	Total
As of July 31,2018								
Auto Bank Loan								
FICO								
300-529	162,500	167,500	-	-	-	-	-	330,000
530-579	-	-	350,000	-	-	-	-	350,000
580-619	-	-	-	182,500	187,500	-	-	370,000
620-659	-	-	-	-	-	390,000	-	390,000
660-699	-	202,500	-	-	-	-	-	202,500
700-719	-	207,500	-	-	-	-	-	207,500
720-739	-	157,500	-	-	-	-	-	157,500
Missing	-	152,500	-	-	-	-	-	152,500
Total FICO	162,500	887,500	350,000	182,500	187,500	390,000	-	2,160,000
Total Auto Bank Loan	162,500	887,500	350,000	182,500	187,500	390,000	-	2,160,000
Auto Bank Loan								
Current - Period Gross Write-offs	100	500	200	100	100	200	-	1,200
Current - Period Recoveries	10	50	20	10	10	20	-	120
Current - Period Net Write-offs	90	450	180	90	90	180	-	1,080

Figure 2: Tracking credit scores at the portfolio level allows for a more meaningful Vintage report.

HOW MUCH HISTORY DO WE NEED?

I'll point back to the last line in the prior paragraph. Check with your auditor and find out what they expect. That said, initially there was a significant disparity in what some people claimed was needed. Some have said as little as a few months of data is needed and others who have said as much as 20 years is needed. Remember, more is better, though it isn't where people will start. As the discussion has raged over the past couple of years, there are two ideas that have emerged, keeping in mind we want enough history to demonstrate life of loan. First is seven- to -10 years. The other term used is "good faith effort."

Many understand getting perfect data to start is difficult at best. With that in mind, some auditors and examiners have said, "Show us a good faith effort." If you have begun collecting the data and have a process in place to continue to build on it, you may be oaky. The trouble is "good faith effort" is subjective at best. If you hope or wish to go this route, talk

While, for instance, if we have a five-year auto portfolio, we may want at least five years of history, whereas 30 years of history may be unattainable for a 30-year fixed mortgage. When looking at some of those longer-lived assets, determine generally the material portion of the loss curve. It is felt that seven- to-10 years will likely capture it. Ask specifically what is the maturity make up of my loan portfolios? If it is longer, go with seven- to-10 years. If it is shorter, maybe less. Keep in mind, more is better.

WHERE CAN WE GET IT?

This question gets interesting. Many times, we've heard,"It's impossible, we don't have the date, it's too hard to get" or "It doesn't exist." At a high level, yes, it does exist. By using things like trial balances and call reports you can get the history needed. It may not allow for detailed pooling but it's there. In fact, there are a plethora of consultants who will do that for you for a 'nominal' fee. Given the leg work involved, it may be worth it.

There could still be holes in data which you want to fill or find an easier and less expensive way of gathering history. In that case, consider third party data. This can be used to back fill data until you get your own. It can also be used for benchmarking and helping with the qualitative discussion to show assumptions are reasonable. Credit Bureaus have data. They have seven- to-12 years of history for consumer loans. This may be a good stop gap.

Then there are core providers. Call them and ask what they have. It is not likely the data they have is perfect. Also, it may not be likely they have more than 12 months history. In my opinion, one of the worst assumptions I've heard is, "I don't have to worry about gathering history. My core has all my data." Then, when they find out otherwise and have finished venting at me, they apologize saying they know it's not my fault, they are just frustrated. Keep in mind, it varies, so ask.

HOW AND WHERE CAN WE STORE AND ACCESS THIS DATA?

Up to now, using Excel, Access or some home-grown database to store data may have been fine. It still can be. However, keep in mind the increased amount of data to be stored. Is that something you want to manage? Or, do you have an existing third-party system that can be leveraged? As we examine implications and common data points with other processes, such as ALM or Budgeting, how do we organize data? Do those systems have a historical database that can simultaneously support multiple disciplines? Can we load the data once and complete multiple activities? Can the behavior adjusted projected cash flows from one system be used for CECL as well, using the same inputs?

CREATE A TEAM AND ASK THE QUESTIONS

As the timeline for adoption compresses, the difficulty in meeting the deadline will increase. If you haven't started yet, start now. Create a CECL team within your institution. Find out what data you need and where to get it. We can provide a list of fields and assist with understanding what is needed for methodologies, pooling and reporting. Most important, be proactive with asking questions. The CECL deadlines are coming. By all of us continuing to ask questions and sharing information, we can make the process more effective and meaningful.

About the Author

Thomas (Tom) Caragher is the Director of Product Management at ZM Financial Systems. He is responsible for the overall direction and strategy for the company's Online CECL solution. Before joining ZM Financial Systems he spent 12 years as the Sr. Product Manager for the risk products at a financial software company.

Prior to that position, Tom spent five years as an interest rate risk consultant, as well as several years at the Chicago Board of Trade in back office operations and as a credit analyst for GreenTree Financial.

1020 Southhill Drive, Suite 200, Cary, N.C. 27513 w3.zmfs.com 919.493.0029