

Three Steps to Effectively Evaluating your Pooled Loans Methodology in the Estimation of the ALLL

By Mike Lubansky, Senior Analyst, Sageworks, Inc.

The biggest challenges that many financial institutions face in the estimation of the Allowance for Loan and Lease Losses (ALLL) are related to the estimations of the General Reserves under ASC 450-20 (FAS5). According to Gary Deutsch, a leading expert on the ALLL and President of BRT Publications, a risk management training and consulting firm: “The most challenging part of the ALLL estimation process is determining the amount of reserves needed for loans analyzed in risk pools...because there is no one best method to determine the losses inherent in the pools.” While there may be no single best method to determining losses inherent in the pools, there are three steps institutions must take to adequately calculate the pooled loans portion of the ALLL and minimize regulatory criticism.

1) Assembling Risk Pools: Avoid Pools that Are Too Broadly Segmented

The first aspect of estimating the General Reserves under ASC 450-20 (FAS5) is assembling risk pools that accurately reflect the segmentation of risk within the institution’s portfolio. Many institutions have historically used overly broad pools for the FAS5 evaluation; they have typically included three or four basic segments, such as Real Estate, Commercial, and Consumer. This breakdown is now viewed by many auditors and examiners as inadequate because these broad buckets are unable to account for the varying levels of risk within each of the loan segments. For example, the “Real Estate” segment could contain loans of such different risk profiles as Commercial Real Estate, Residential Real Estate, and Construction and Development, among others. The first step many banks have taken to make their pools more specific is to segment by FDIC call code. This methodology is an improvement over the basic, three to four portfolio segment breakdown; however, it is still not granular enough.

In fact, the Accounting Standards Updates from FASB in 2010 (ASU 2010-20) require that institutions begin using at least two levels of disaggregation for their risk pools and even recommends a third level. The three levels of disaggregation are usually portfolio segment (discussed above), class, and measurement attribute. For example, Commercial Real Estate is a portfolio segment; this segment can be disaggregated further by class or collateral type into groupings such as “Commercial Real Estate- Office Building “ and “Commercial Real Estate-Retail.” Those segments can be broken down to a third level by measurement attribute such as risk rating, delinquency, or risk level (Pass, Special Mention, Substandard, and Doubtful), resulting in much more specific pools such as, “Commercial Real Estate-Office- Substandard,” which allows the bank to more accurately assess the risk inherent in each pool using qualitative adjustments differently within each of the more specific pools.

2) Applying a Historical Loss Factor: Historical Loss Rates vs. Migration Analysis

Once the institution establishes the appropriate segmentation, they must decide what methodology to employ to determine a historical loss factor within each pool. This step is crucial in order to make an accurate assumption of the losses that might be incurred in each pool in the coming period. There are two primary approaches: the historical loss rate approach and the migration analysis approach.

Many banks employ the historical loss rate approach, at least partly because data collection is easier. The historical loss rate approach primarily requires tracking charge-offs and recoveries within each segment over a defined period of time. Within this approach, the two primary challenges are (1) determining the appropriate number of periods of data to incorporate and (2) whether to apply an arithmetic average or weighted average of loss rates. Traditionally,

institutions have used a longer time horizon that incorporates three to five years of loss data. The drawback of this is that it may not reflect the increased losses that have been incurred in recent years. As such, more and more institutions are now using a shorter time horizon such as a rolling four to eight quarters. Another option to ensure that more recent loss rates are appropriately taken into account is to use a weighted average that applies greater weight to more recent loss rates. Regardless of the number of periods used or the type of average that is applied, the institution must ensure that it uses historical loss factors that are indicative of the losses inherent in each segment of the portfolio at the current time.

The drawback of the historical loss rate approach is that it can be less effective in times of economic turbulence than a migration analysis approach. Gary Deutsch notes: “Although migration analysis is used less than the historical loss method, it is actually more effective at estimating inherent losses during times of economic volatility.” Under the migration analysis approach, institutions track the migration of loans from various buckets to charge off status which can give a more accurate picture of how the current portfolio would migrate to loss. The basic methodology for migration analysis is to set up appropriate buckets to track within each segment. As an example, within consumer loans, this could be based on delinquency (Current, 30-59 days, 60-89, and 90+ Days Past Due), and within commercial loan segments, this could include general risk level (Pass, Special Mention, Substandard, and Doubtful). The institution must then determine the defined loss horizon.

As a simple example, let’s say the institution uses eight quarters as the defined loss horizon. This would mean that the institution would take the total loan balance for that segment within that bucket (ie, Commercial Real Estate- Office - Substandard, \$8,000,000). It would then use the amount of charge-offs during the subsequent eight quarters from this \$8,000,000 bucket to determine the loss factor for the CRE- Office – Substandard segment. The biggest challenge in migration analysis is the data collection process; it takes a minimum of four quarters with a structured data collection process to gather enough data to use this approach for estimating loss factors. The migration analysis approach can be more robust; however, for many institutions, the standard historical loss rate approach may still be adequate and most appropriate.

3) Evaluating Qualitative & Environmental Factors

Perhaps the biggest challenge that institutions face in the estimation of the ASC 450-20 (FAS5) reserves is the determination of adjustments to take into account qualitative and environmental factors that may impact loan losses. These factors are inherently subjective, so institutions face scrutiny on the documentation used to justify any assumptions made.

The first judgment made in this process is to determine which qualitative factors to assess. A good starting point is to use the nine standard qualitative adjustments cited in the Interagency Guidelines on the ALLL. These can be modified where appropriate depending on the levels of risk within an institution’s overall portfolio and within specific portfolio segments. Secondly, the institution must evaluate its portfolio and segments on each of the qualitative factors and apply a quantitative estimate to each qualitative adjustment. It is imperative that the institution documents all of its assumptions around the qualitative adjustment factors. For example, if an institution is evaluating the impact of “Changes in the volume and severity of past due loans and other similar conditions,” the institution’s documentation should reference its delinquency rates in that segment in context of historical delinquency in the segment. Vincent Van Nevel, Managing Director of Professional Bank Services, a bank consulting firm located in Louisville, KY, notes: “These adjustments can be highly subjective; however, if the institution has any prior experience with similar cycles or events in the past, it can research the impact such events had on its portfolio. This assumes similar underwriting practices were in effect in past periods. Other sources for determining the magnitude of such adjustments include peer experience, and in particular loss experience by loan type for institutions experiencing higher loss experience.” Additionally, where appropriate, the institution should reference trends in national, regional, and local economic data, which can be found through various sources, including the Federal Reserve Economic Database and the FDIC Regional Economic Conditions data, amongst others.

The institution can also consider employing a more quantitative approach for the estimation of the impact of these economic factors. This can be done through a simplified correlation analysis approach. For example, the institution can do a simple regression on their loss rates (using at least 12 periods) against an economic factor (i.e., using housing starts as correlated to loss rates in

construction and development segments). Additionally, the institution can employ back-testing to match up its historical losses with the levels of its ALLL over past periods to show the historical accuracy of the assumptions used in its methodology. The estimation of the qualitative factors in this instance may still largely be judgmental and subjective, but a correlation analysis, peer comparisons, and historical back-testing can provide quantitative support to these judgments.

The most important thing to keep in mind when making all of the judgments used in assembling risk pools, applying historical loss factors, and making qualitative adjustments, is that the institution should maintain extensive documentation of its methodology and the justifications for each assumption used. This will allow for a consistent process going forward and make it more difficult for the institution to be criticized by regulators around their Allowance estimation.

About Mike Lubansky: Mike Lubansky is Senior Financial Analyst and Product Manager at [Sageworks](#) where he oversees product development, market research, and implementation in the financial institutions market. Mr. Lubansky has a background in both the financial and consumer industries. Before joining Sageworks in 2009, Mr. Lubansky served as Research Analyst for the Cherry Hills Fund and as Financial Analyst for Humana. Prior to that, Lubansky spent time as Specialty Account Manager for Pfizer and District Manager for consumer products marketing firm, Vector Marketing. Mr. Lubansky received his MBA with concentrations in Finance and Entrepreneurship from the University of North Carolina-Chapel Hill and his BA in American Studies from Yale University. He is also a CFA Level 2 candidate.

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Public Relations Department

pr@sageworksinc.com

866.603.7029 ext. 590