Allowance for Loan and Lease Losses: Building the Right Model

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Recent regulatory emphasis, the changes in the economic climate, the uncertainty in the real estate market and the economy have all culminated in a confusing and erratic environment regarding the establishment of a bank's ALLL Reserve. The regulatory scrutiny has been tremendous. Of course, along with such scrutiny brings an element of inconsistency which is derived primarily by the regulatory desire to increase the ALLL Reserve. Such desire is often in direct conflict with the bank's, which has a main objective to not only maintain an adequate reserve balance but also to preserve earnings and capital levels. To compound this scenario, Generally Accepted Accounting Principles ("GAAP") with respect to ALLL calculation are vague and concentrate primarily on historical losses as the yardstick for measuring existing unidentified losses.

The adequacy of a loan reserve becomes a subjective assessment which requires an institution to assess risk and estimate a sufficiently adequate reserve. From a regulatory perspective, the guidance for the ALLL calculation stems primarily from the 2006 Inter-agency Policy Statement on Allowance for Loan and Lease Losses ("IPS") combined with other regulatory and accounting directives to establish guidelines and requirements for the accounting of estimating inherent loan losses and determining an adequate loan loss reserve. Over the past few years, regulators have increased their insistence on requiring institutions to follow the ALLL methodology as specified in the IPS. According to the IPS, “The determination of the amounts of the ALLL should be based on management’s current judgments about the credit quality of the loan portfolio, and should consider all known relevant internal and external factors that affect loan collectability as of the evaluation date.”

The directives require institutions to implement a consistent and verifiable method for determining ALLL - and be able to demonstrate that their process results in a reasonable and justifiable loan loss reserve. The Inter-agency policy requires banks to approach the ALLL reserve calculations in accordance with GAAP, using two distinct perspectives, the guidelines of using ASC 450 (formerly, FAS No. 5 - Accounting for Contingencies, for grouped loans) and ASC 310 (formerly, FAS No. 114 - Accounting by Creditors for Impairment of a Loan, for individual loans). Finally, the IPS states that an institution needs to be able to validate and support the adequacy of its ALLL.
The ASC 450 methodology is perhaps where the greatest challenge with respect to documentation comes in for many institutions. The guidance tells you the following:

- **The bank should group its loans according to type or homogeneous pools of similar risk characteristics.** The practice seems to allow the use of call report categories. Unless a Bank has maintained better historical records, it is difficult to get prior historical quantitative data relevant to charge-offs or delinquency trend by other sub categories.

- **The bank must calculate its historical loss rate for each loan category.** An institution needs to determine the historical loss rate for each group of loans with similar risk characteristics in its portfolio based on its own loss experience for loans in that group. So the question then becomes, "How do we calculate the historical loss average for each homogenous pool of loans?" Footnote 20 of the IPS states, "Annual charge-off rates are calculated over a specified time period (e.g., three years or five years), which can vary based on a number of factors including the relevance of past periods' experience to the current period or point in the credit cycle." While the IPS' reference to three to five years may have been well intended, the recent regulatory emphasis learned through the recent safety and soundness examinations has revealed that the regulators currently prefer a two year look back with a greater weight on more recent loss history. The understanding being that since there have been more charge-offs in recent history compared to the past, the use of the recent two year history (as opposed to a five year history) would yield a higher charge-off rate, hence a higher reserve. More importantly, an institution must document the method it uses to establish its loan pool historical loss rates. Thus, the regulatory practice has clearly established that there is no set or firm period for calculating historical loss average, it is one that must be reviewed and analyzed periodically to ensure that it is not being understated to reflect current trend by using periods which may have a lower historical losses and are not indicative of the current environment.

- **The bank must adjust those historical loss ratios for internal and external qualitative factors.** This is perhaps the one area that has confounded many institutions in their ability to document and support its estimate and judgment. The IAP suggests that, unlike GAAP which traditionally seems to accept historical loss experience as a basis for calculating the inherent losses in the portfolio, historical losses, or even recent trends in losses, do not by themselves form a sufficient basis to determine the appropriate level for the ALLL. Instead, they provide a reasonable starting point for the institution’s analysis. Management should also consider those qualitative or environmental factors that are likely to cause estimated credit losses associated with the institution’s existing portfolio to differ from historical loss experience. The IPS lists the following qualitative factors that an institution should consider to adjust the historical loss percentage for each homogenous pool of loans:
Changes in lending policies and procedures, including changes in underwriting standards and collection, charge-off, and recovery practices not considered elsewhere in estimating credit losses.

Changes in international, national, regional, and local economic and business conditions and developments that affect the collectibility of the portfolio, including the condition of various market segments.

Changes in the nature and volume of the portfolio and in the terms of loans.

Changes in the experience, ability, and depth of lending management and other relevant staff.

Changes in the volume and severity of past due loans, the volume of nonaccrual loans, and the volume and severity of adversely classified or graded loans.

Changes in the quality of the institution’s loan review system.

Changes in the value of underlying collateral for collateral-dependent loans.

The existence and effect of any concentrations of credit, and changes in the level of such concentrations.

The effect of other external factors such as competition and legal and regulatory requirements on the level of estimated credit losses in the institution’s existing portfolio.

In practice, the assignment of a quantitative adjustment relating to an institution’s assessment for each of the qualitative factors listed above has been a challenge and the source of most regulatory exam criticism with respect to an institution’s ALLL methodology. This is not so easy to justify, quantify or document. Best practice suggests that an institution convert each of the factors into a mini risk assessment. The objective of this assessment would be to gauge responses to a series of questions that would be pertinent to each of the factors. The responses can be used to summarize an overall risk assessment for each factor (i.e., high, moderate, and low) The resulting risk rating of each factor can then be used to dial up or down the historical loss percentage. The overall intent is to support an institution’s risk assessment for each of the factors and the quantitative assignment used to dial up or down the historical loss percentage. Documentation of the judgment and estimate is what is paramount in this regard.

The bank must be able to identify loan loss trends as well as additional issues or factors that affect the quality or risk assessment of its loan pools. While the statement is vague, it has been used by the regulators in practice to require a further adjustment to the historical loss percentage. Regulators still require institutions to segregate the classified loans for each homogenous pool and use a higher historical loss percentage. Generally, while not specifically specified in any regulation, the adjustment to the historical loss percentage for the classified loans can be based on the assessment of the delinquency or concentration risk trend.
• The bank must calculate the ALLL for each loan pool to determine its total amount of loan loss reserves. This is perhaps the easiest part. Once we have the adjusted historical loss percentage, we can easily apply it to the outstanding loan balance for each loan category.

An institution should not include Off Balance Sheet items (i.e., unfunded credit lines, loan commitments, etc.) in calculation of the ALLL.

So to summarize, the ASC 450 reserve calculation is derived by:

• Taking the more recent historical loss percentage for each pool of loans (most likely two years, but that can change and should be assessed periodically) and adjusting it by the risk assessment for the qualitative factors listed in the interagency policy.
• The adjustment for these qualitative factors needs to be documented through some sort of an internal/external assessment.
• The adjusted historical percentage after the adjustment for the qualitative factors should be further adjusted for delinquency and concentration risk for each loan pool. This adjusted historical loss percentage can be applied to the portion of the portfolio that is higher risk rated or classified.
• An institution should not include the off balance sheet items for each loan pool.
• An institution should also exclude loans for which it has performed a valid ASC 310 impairment review. To obtain regulatory confidence in excluding loans for which an ASC 310 review has been performed, an institution should ensure that such review process is robust, detailed and well documented.

**ASC 310 ALLL calculation**

**Defining impaired loans**

The IPS states that the starting point for this calculation is the identification of all loans that are deemed to be potentially impaired. IPS states that the identification of these loans can come from an institution's "normal loan review procedures." However, the guidance does not specify what that means. The translation of this language would suggest the inclusion of loans that meet some sort of a classified loan classification. Thus, a financial institution should review each of its classified loans individually to identify those that are deemed as "impaired" loans. Loans determined not to be impaired are returned to their pools for analysis under ASC 450 (FAS 5). In accordance with inter-agency policy, loans which have been reviewed for impairment and where there is no quantitative measurement of impairment are not required to be returned to the ASC 450 (FAS 5) pool.
While the calculation of the actual ASC 310 reserve amount is somewhat simpler than the ASC 450, the issue where most institutions get criticized, and where the process seems to be weak is the first step of identifying potentially impaired loans. If the loan is not deemed to be impaired, then it must be pushed back for ALLL calculation purposes into the ASC 450 (FAS 5) pool category.

As stated above in accordance with the IPS, “loans which have been reviewed for impairment and where there is no quantitative measurement of impairment, those loans are NOT required to be returned to the ASC 450 pool.”

The key takeaway here is the issue of an institution’s definition and assessment of what constitutes an impaired loan. An institution should develop a definition and then apply it consistently. Thus, a loan which is believed to be potentially impaired, and does not meet the institution’s definition of such, must be returned to the ASC 450 pool for ALLL calculation purposes. This is different from taking a loan (which meets an institution’s definition of an impaired loan), measuring the amount of impairment and concluding that collateral value exceeds the loan balance. In this scenario, such a loan does not need to be pushed back to the ASC 450 pool.

Based on findings from regulatory examinations, this has been an area that has been inconsistently applied in many regulatory exams, and the concept misunderstood the most by many institutions.

According to GAAP, a loan is impaired when it is probable that a creditor will be unable to collect all amounts due according to the contractual terms of the loan agreement. Such an assessment is often subjective and ripe for regulatory examination second guessing. In practice, many institutions have turned to their loan review risk rating classification as an objective way to ensure that all applicable loans are appropriately included on the impaired loan list. Thus, many automatically include all loans that are on the non-accrual list. Additionally, many institutions include loans that are also risk rated as substandard and some that are also rated as special mention. Theoretically, the technical definition of substandard or special mention does not automatically indicate that it is probable that a creditor will be unable to collect all amounts due. Traditionally, the payment history or the likelihood that a borrower’s inability to repay has been impaired is the general criteria. Thus, loans classified as non-accrual should definitely qualify. If your institution has classified loans as substandard and such are not on the nonaccrual list, you may want to review those loans to assess whether they should really be included in your review.

So why do some institutions consider for inclusion loans that are rated as special mention? Based on practical experience, what has become apparent is that many institutions do not have an adequate loan risk rating process. Thus, the special mention rating for a particular loan may not either be reflective of the underlying risk or more probably the risk rating may be stale and reflective of the current situation and trend.
The Interagency guidance states that an institution should rely on its normal loan review program for identifying impaired loans. Many community banks outsource their loan review function. So if an institution is going to rely on such a review it must assess the adequacy of the frequency of such a review; an annual review is not going to be practical in assisting the institution with a current rating of the classified loans. If the identification of potentially impaired loans is tied to loan classification risk ratings, then an institution must ensure that those ratings are reviewed more frequently.

**ASC 310 impairment measurement**

According to ASC 310, an institution can estimate the amount of loss based on one of three approaches: present value of estimated future cash flows, fair market value of collateral for collateralized loans, and observable market price of loan.

For an individually evaluated impaired collateral dependent loan, if the recorded amount of the loan exceeds the fair value of the collateral (less costs to sell if the costs are expected to reduce the cash flows available to repay or otherwise satisfy the loan), this excess is included when estimating the ALLL. By now, most understand how to calculate the potential impairment amount. The contention during regulatory exams has been how one determines fair market value and what support an institution has to provide to support its fair market value assessment. The Q&A section of the IPS actually provides some concrete guidance on that:

In general, the institution should document the analysis that resulted in the impairment decision for each loan and the determination of the impairment measurement method used. Additional documentation would depend on which of the three impairment measurement method is used. For example, for collateral-dependent loans for which an institution must use the fair value of collateral method, the institution should document: (1) how fair value was determined including the use of appraisals, valuation assumptions, and calculations; (2) the supporting rationale for adjustments to appraised values, if any; (3) the determination of costs to sell, if applicable; and (4) appraisal quality and the expertise and independence of the appraiser.

Some institutions, however, attempt to derive the estimated fair market value of the collateral property by taking the old appraisals in the loan file from the time of origination and discounting it based on their estimate of the decline in the property values in the particular area. This methodology, although reasonable, is often not well supported and has therefore not worked well with the regulators. Regulatory exams have indicated that regulators have been insisting that institutions obtain a current bona fide appraisal, but that costs money and most institutions cannot pass this cost on to a borrower who is having a difficult time making normal payments as it is. So many institutions tend to procrastinate in getting an appraisal.
While not specifically specified anywhere, the regulatory expectancy is that an institution should set a time frame and a consistent framework to ensure that they are being ordered and obtained in an objective, consistent and timely manner.

One point to remember is that in an environment where the market values have not declined so significantly and where an institution has maintained a conservative underwriting LTV policy, the ASC 310 analysis after current appraisal can very often result in the calculation of an impairment amount that may actually be negligible. Thus, in such instances, the amount of reserve allocation (even including the cost of getting a new appraisal) can actually be lower than the amount of ASC 450 ALLL reserve that would be required on such a loan without such an analysis. Institutions should keep this concept in mind and not concentrate too much on the hard out-of-pocket cost of obtaining an appraisal.

Loan risk classification rating

The biggest challenge for institutions is to ensure that they are not surprised during their regulatory exam. If an important component of ALLL is tied to the identification of impaired loans which, in turn, are tied to your loan risk classification rating, then a regulatory exam which challenges those ratings can end up with a significant adjustment to an institution’s ALLL.

This is where many institutions fall short. Their loan review programs do not adequately identify inherent risks consistent with the regulatory emphasis. Institutions may want to review their existing loan review programs with a view of ensuring that they provide objective criteria for the institution’s internal loan risk classification ratings. To improve objectivity and transparency in the loan review risk rating process, an institution should develop specific risk drivers, such as an assessment of borrower financial information, payment history, collateral value, debt service ratios, etc. Tie the movement, or your assessment of those drivers, to your loan rating. Obviously, loan ratings can never be totally objective as individual situations will differ, but the more objective you can be, the less surprise you will have...and the more you will be able to support your assessment. Thus, loan reviews need to evolve to more quantification of data and assessment, rather than a subjective narrative assessment to support the loan ratings.

Charge off or ALLL reserve

Another area of much confusion has been whether the impaired portion of loan, once calculated, should be added to ALLL or charged off. The IPS states that the portion of the impaired amount that an institution determines as being a loss and uncollectible should be charged off. Meaning, once an institution calculates its measurement of the impairment amount for each loan, it should then further assess what portion of the impaired amount is collectible and what
portion is not. One cannot assume that all of it will be collectible and simply add it to the reserve. This has to be evaluated on an individual case-by-case basis.

Summary of ASC 310 ALLL calculation

**Step 1:**

1. **Identify Loans to be individually evaluated for impairment**

2. **Is it probable that the Bank will be unable to collect all amounts due?**
   - **Yes:** Measure Impairment
   - **No:** Return loan to its Group for FAS 5 evaluation
Step 2:

Measure Impairment

- Method 1
  Present value of expected cash flows

- Method 2
  (mandate if the loan is collateral dependent)
  Fair Value or Appraised Value of collateral less costs to sell

- Method 3
  Observable Market Price of Loan

Step 3:

Is there an impairment amount?

- Yes
  Set up an ASC 310 impairment amount in the total ALLL (for portion deemed collectible)

- No
  No ALLL is required
Validation

The IPS specifically states that “Institutions are also encouraged to use ratio analysis as a supplemental tool for evaluating the overall reasonableness of the ALLL.” According to the IPS the Board of Directors and senior management are responsible for assessing the adequacy of the calculated ALLL. Thus a calculation of an ALLL amount, the reasonableness of which is not adequately supported, is deemed inadequate. As part of its ALLL calculation, an institution should establish key ratios to help understand, evaluate and support the adequacy of its ALLL. In this regard, the IPS states the following:

*Ratio analysis can be useful in identifying divergent trends (compared with an institution's peer group and its own historical experience) in the relationship of the ALLL to adversely classified or graded loans, past due and nonaccrual loans, total loans, and historical gross and net charge-offs. Based on such analysis, an institution may identify additional issues or factors that previously had not been considered in the ALLL estimation process, which may warrant adjustments to estimated credit losses. Such adjustments should be appropriately supported and documented.*

Thus, the ALLL calculation should not be determined in vacuum. The IPS suggests that such analysis can assist an institution to evaluate the adequacy of the calculated ALLL to provide comfort that methodology and the assumptions used are adequate.

First step in developing such periodic analysis is to determine the institution’s peer group. The peer group can be based on any of the following:

- Institutions in the geographical area
- Institutions with similar asset size
- Institutions with same charter and size
- Institutions with a similar loan concentration in the same geographical area (the more preferable - as these institutions represent those that lend similarly and therefore have similar credit risks)

For the selected peer group, an institution can benchmark the trend for certain key ratios. Examples of such ratios can include the following:

- Total past due loans to gross loans
- Total non-accrual loans to gross loans
- Past due and non-accrual loans to gross loans
- Total charge-offs to gross loans
- ALLL to gross loans
- All to past due and non-accrual loans
• Texas Ratio

The ALLL, as the IPS points out, is an institution specific calculation. Thus, while ratios can assist an institution in providing the overall reasonableness of the calculated ALLL, they are not intended for an institution to gravitate its calculation to the peer median even when the institution’s credit trend analysis and portfolio risks may indicate otherwise. For example, it is possible that an institution calculates its ratio of the ALLL to past due loans and non-accruals to be at 24% while its peer group is at 43%. On the surface, it might appear that the institution’s ALLL in comparison to its Peer group is somewhat lower. However, additional analysis indicates that the institution has performed an ASC 310 analysis on a significant number of its classified loans and because of its inherent conservative LTV underwriting lending policy, there is no impairment calculation on such loans. Thus, in this scenario, the institution can identify the gap in a key credit ratio and support the gap based on its analysis.

Conclusion

Naturally, on a topic as diverse and complicated as ALLL, there may be other issues that may have not been included in this writing. The abundant confusion on the topic certainly stems from many sources. From lack of internal knowledge due to almost no emphasis on such issues over the past 20 years, inconsistent and absent regulatory emphasis, vague and in concise regulatory policies, applying standards learned from poorly managed institutions to those that were not and unavailability of appropriate uniform benchmark data and risk indicators.

When it comes to the ALLL calculation, an institution should document and support all of the assumptions, and validate and tell its story to support the calculated ALLL amount.

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