Applying GAAP in the Allowance Analysis

This Farm Credit Administration (FCA) document is an extension of the EM-21.2 Allowance for Losses Examination Manual section. It provides additional, supporting information and examination guidance.

An allowance for loan losses (ALL or allowance) recorded pursuant to generally accepted accounting principles (GAAP) is an institution's best estimate of the probable amount of loans that it will be unable to collect based on events and conditions existing at the date of the financial statements. An institution should record an ALL when the criteria for accrual of a loss contingency as set forth in GAAP have been met. Estimating the ALL amount involves a high degree of management judgment and is inevitably imprecise. Accordingly, an institution may determine the amount of loss falls within a range. An institution should record its best estimate within this range. Under GAAP, Accounting Standards Codification (ASC) 450 Contingencies (formerly Financial Accounting Standard (FAS) 5) and ASC 310 Receivables (formerly FAS 114) provide the guidance for recognition of a loss contingency, such as the collectability of loans and when it is probable that a loss has been incurred and the amount can be reasonably estimated. ASC 310 provides more specific guidance about measuring and disclosing impairment for certain types of loans on an individual basis. Loans are considered impaired when, based on current information and events, it is probable the creditor will be unable to collect all interest and principal payments due according to the contractual terms of the loan agreement. This document provides additional information and illustrations for the two key ALL components – specific allowances and the general allowance.

Specific Allowances

For individually impaired loans, ASC 310 provides guidance on the acceptable methods to measure impairment. It states that when a loan is impaired, a creditor should measure impairment based on the present value of expected future principal and interest cash flows discounted at the loan's effective interest rate. As a practical expedient, ASC 310 also allows a creditor to measure impairment based on a loan's observable market price or the fair value of collateral, less costs to sell, if the loan is collateral dependent. When developing the estimate of expected future cash flows for a loan, an institution should consider all available information reflecting past events and current conditions, including the effect of existing environmental factors as of the balance sheet date.

An institution's specific allowance methodology begins with using normal loan review procedures to identify if a loan is impaired as defined by the accounting standard. Institutions should document:

- The method and process for identifying loans to be evaluated under ASC 310.

- The analysis that resulted in an impairment decision for each loan and the determination of the impairment measurement method to be used (i.e., present value of expected future cash flows, fair value of collateral less costs to sell, or the loan's observable market price). Once an institution has determined which of the three available measurement methods to use for an impaired loan under ASC 310, it should maintain supporting documentation as follows:

    - When using the present value of expected future cash flows method:
        - The amount and timing of cash flows.
        - The effective interest rate used to discount the cash flows.

        - The basis for determining cash flows, including consideration of current environmental factors and other information reflecting past events and current conditions.

    - When using the fair value of collateral method:
        - How fair value was determined, including the use of appraisals, valuation assumptions, and calculations. In addition, the expertise and independence of the appraiser should be factored into the use of an appraisal.
        - The supporting rationale for adjustments to appraised values, if any.
        - The determination of costs to sell, if applicable.

    - When using the observable market price of a loan method, the amount, source, and date of the observable market price.

The measurement method selected for an individual loan should be applied consistently to that loan. A change in method for a particular loan should be justified by a change in circumstances related to the loan.

Illustration A describes a practice for documenting specific allowance measurement using a comprehensive worksheet. However, some loans that are evaluated individually for impairment under ASC 310 may be fully collateralized and therefore require no ALL.

Illustration A – Documenting an ALL Under ASC 310

Comprehensive worksheet for each loan individually considered for impairment: *Each worksheet includes a description of why the loan was selected for individual review, the impairment measurement technique used, the measurement calculation, a comparison to the current loan balance, and the amount of the ALL for that loan. The rationale for the impairment measurement technique used (i.e., present value of expected future cash flows, observable market price of the loan, or fair value of the collateral) is also described on the worksheet.*

General Allowance

Segmenting the Portfolio

If the institution evaluates loans on a group basis under ASC 450 (with applicable concepts from ASC 310), management should segment the portfolio using risk characteristics that are common to groups of loans. Smaller institutions that are involved in less complex activities often segment the portfolio into broad loan categories, such as by commodity concentration, suitable for a narrow range of loan products offered. Larger institutions typically offer a more diverse and complex mix of loan products. Such institutions may start by segmenting the portfolio into major loan types, but typically have more detailed information available that allows them to segregate the portfolio further into product line segments based on the risk characteristics of each portfolio segment. Regardless of the segmentation method used, an institution should maintain documentation to support its conclusion that loans in each segment have similar attributes or characteristics.

As economic and other business conditions change, institutions often modify their business strategies, which may result in adjustments to the way they segment their loan portfolio for purposes of estimating

loan losses. Illustration B presents an example in which an institution refined its segmentation method to consider risk factors more effectively, and maintained documentation to support this change.

Illustration B – Documenting Segmenting Practices

Refining a segmentation method: *An institution determined its ALL based on historical loss rates in the overall portfolio. The ALL methodology was validated by comparing actual loss rates (chargeoffs) for the past 2 years to the estimated loss rates. During this process, the institution decided to evaluate loss rates on an individual product basis (e.g., rural homes, unsecured loans, and consumer loans). This analysis disclosed significant differences in the loss rates on different products. With this additional information, the methodology was amended in the current period to segment the portfolio by product, resulting in a better estimation of the loan losses associated with the portfolio. To support this change in segmentation practice, the Credit Review Committee records contain the analysis that was used as a basis for the change and the written report describing the need for the change.*

Institutions use various documents to support the portfolio segmentation process. Examples include:

- Loan trial balances by categories and types of loans.
- Management reports about the mix of loans in the portfolio.
- Delinquency and nonaccrual reports.
- A summary of results from an internal or external loan grading review.

Reports that assess the profitability of a loan product line may be useful in identifying ways to further segment the portfolio.

Estimating Loss on Groups of Loans

If segmenting the portfolio, an institution should estimate the general allowance needed for each segment. This estimate should be based on an ongoing, systematic approach that includes the loan review process and analysis of loan performance to select the most appropriate loss measurement methods. An institution should demonstrate and document that the loss measurement methods used to estimate the ALL for each segment are determined in accordance with GAAP as of the financial statement date.

One method of estimating loan losses for groups of loans is by applying loss rates to the groups' aggregate loan balances. Such loss rates typically reflect historical loan loss experience for each group of loans, adjusted for relevant environmental factors (e.g., industry, geographical, economic, and political factors) over a defined period. If an institution does not have loss experience of its own, it may be appropriate to reference the loss experience of another institution. However, the attributes of the loans in its portfolio segment need to be similar to those of the loans in the portfolio of the institution providing the loss experience. Institutions should maintain supporting documentation for the technique used to develop their loss rates, including the period of time over which the losses were incurred. If a range of loss is determined, institutions should maintain documentation to support the identified range and the rationale used for determining which estimate is the best estimate within the range of loan losses per GAAP guidance.

An example of how a small institution performs a comprehensive historical loss analysis is provided as the first item in Illustration C. The second item in Illustration C provides an example of how an

institution adjusts its real estate historical loss rates for changes in local economic conditions. While loans may not be individually impaired, sometimes there are characteristics indicating there are loan losses on a group basis.

Illustration C – Documenting the Setting of Loss Rates

Comprehensive loss analysis in a small institution: *The institution determines its loss rates based on chargeoffs and recoveries over a 3 to 5 year historical period. The analysis is conducted by loan type and is further segmented by originating branch office. The institution maintains supporting documentation for its loss factor analysis, including historical losses by loan type and originating branch office for the 3 to 5 year period.*

Adjustment of loss rates for changes in local economic conditions: *An institution develops a factor to adjust loss rates for assessing the impact of changes in the local economy. For example, when analyzing the loss rate on real estate loans, the assessment identifies changes in land values for recent sales. The institution generally finds these statistics to be a good indicator of probable losses on these types of loans. The institution maintains documentation that summarizes the relationship between real estate value changes and its loss experience.*

There is no fixed time period that institutions should use to determine historical loss experience. During periods of economic stability in an institution's market, a relatively long time period may be appropriate. However, during periods of significant economic expansion or contraction, data that is several years old may have limited relevance. The period used to develop a historic loss rate should be long enough to capture sufficient loss data. At some institutions, the length of time used varies by segment.

Before employing a loss estimation model, an institution should evaluate and modify, as needed, the model's assumptions to ensure the resulting loss estimate is consistent with GAAP. To demonstrate consistency with GAAP, institutions that use loss estimation models need to document the evaluation, the conclusions regarding the appropriateness of estimating loan losses with a model or other loss estimation tool, and the support for adjustments to the model or its results. In developing loss measurements, institutions should consider the impact of current environmental factors and then document which factors were used in the analysis and how those factors affect the loss measurements. Examples of factors that should be considered in developing loss measurements include:

- Levels of and trends in delinquencies and impaired loans.
- Levels of and trends in chargeoffs and recoveries.
- Trends in volume and terms of loans.
- Effects of any changes in risk selection and underwriting standards, and other changes in lending policies, procedures, and practices.
- Accuracy of risk identification processes.
- Experience, ability, and depth of lending management and other relevant staff.
- National and local economic trends and conditions.
- Industry conditions.
- Effects of changes in credit concentrations.
- Bankruptcy rates.

An institution should maintain sufficient, objective evidence to support any loss measurement adjustments for environmental factors. This evidence should explain why the adjustment is necessary to reflect current information, events, circumstances, and conditions in the loss measurements.

An institution should not layer its loan loss allowances. Layering is the inappropriate practice of recording in the ALL more than one amount for the same probable loan loss. Layering can happen when an institution includes a loan in one segment, determines its best estimate of loss for that loan either individually or on a group basis (after taking into account appropriate environmental factors, conditions, and events), and then includes the loan in another group that receives an additional ALL amount.

Qualitative Adjustments

The loss rates and risk ratings used in loss estimation models may not fully capture the impacts of present conditions in the lending environment at the financial statement date. For example, loss estimation models are inherently "backward looking" to an extent, with loss rates typically based in some manner on historical loss experience. Additionally, loan risk ratings are assigned at origination and may not be revised until a loan is renewed, subject to a servicing action, or becomes delinquent. Accordingly, risk ratings can also be somewhat "backward looking." To address this, management may use any number of methods to support qualitative adjustments to the allowance amounts recommended by loss estimation models. Illustration D provides three examples.

Illustration D – Qualitative Adjustments

Example One: *Management estimates the financial impacts to borrowers (e.g., percent changes in revenues, expenses, and asset values) from adverse conditions present in the lending environment. These estimates are based on documented analysis of current commodity prices, input costs, real estate values, local employment conditions, weather, or other factors specific to the identified adversity. Management then uses a portfolio modeling tool to stress existing probability of default (PD) or loss given default (LGD) ratings based on those estimates and recalculate allowance amounts for the impacted loans. Recognizing that not all loans will be impacted to the same extent, management may adjust the additional amounts identified.*

Example Two: *Management estimates changes in PD or LGD ratings attributable to adverse conditions in the current lending environment. As in example one, adjustments are supported by documented analysis of factors specific to the adversity being considered. These revised ratings are used in the loss estimation model to determine additional allowance amounts. Management uses stress analysis on the portfolio, utilizing a portfolio modeling tool, to support the reasonableness of amounts identified.*

Example Three: *Management identifies qualitative factors applicable to various loan pools that will probably impact collectibility, such as corn prices, cattle prices, milk prices, oil prices, unemployment rate, housing starts, and change in housing prices. Management then assigns a sliding scale of multipliers (one for each qualitative factor) to estimate additional embedded losses in the portfolio not captured in the loss factors related to PD or LGD ratings. Management adjusts the multiplier for each qualitative factor based on documented analysis of factors specific to the adversity being considered.*

Note: *In all three examples above, the analysis excludes any loans identified for individual assessment for impairment under ASC 310. Additionally, the methods identified may be applied to specific loan pools, portfolio segments, or an entire portfolio, depending on the adversity considered.*
