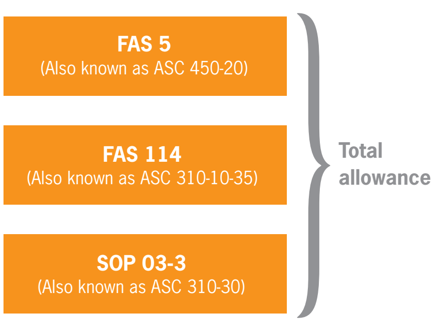
Allowance for loan and lease losses (ALLL) adjustment factors

Introduction

The allowance for loan and lease losses (the "allowance") for a bank has several components. The primary components consist of loans collectively evaluated for impairment (the FAS 5 component[1]), loans individually evaluated for impairment (the FAS 114 component[2]), and loans acquired with deteriorated credit quality (the SOP 03-3 component[3]). This paper focuses on the FAS 5 component of the allowance.

Major ALLL components



Background

The FAS 5 component, often the largest, is for loans that have not been individually identified as being impaired. These loans are likely performing in accordance with contractual terms (or any nonperformance is minor) at the date of the financial statements. Nevertheless, based on past experience or other factors, there is reason to believe that some of these loans have suffered from loss-causing events and/or circumstances that the bank may not be able to specifically identify at the date of the financial statements. For example, a bank may be unaware that a borrower has lost his or her job as of the date of the financial statements, indicating that the loan risk profile has likely increased, but for now the loan is current.

FAS 5 sets forth the general principle for accruing all types of losses — insurance, litigation, loan losses, etc. — and requires that losses be estimated and accrued when two conditions are met:

- Information available before the financial statements are issued or are available to be issued indicates that it is probable that an asset had been impaired or a liability had been incurred at the date of the financial statements. It is implicit in this condition that it must be probable that one or more future events will occur confirming the fact of the loss.
- The amount of the loss can be reasonably estimated.

The language in FAS 5 is not difficult to understand, yet the application can be complex. Subsequent to its issuance, the FASB, the SEC, bank regulators and others have issued interpretive guidance and additional publications related to the application of FAS 5 to a bank's loan portfolio.

Incurred losses

One thing that FAS 5 is very clear about is that a loss, in order for it to be accruable, must have already occurred by the date of the financial statements. In other words, expected future losses are not accruable, no matter how likely. This is what is meant by references to the "incurred loss model." For example, consider a hurricane bearing down on the Gulf Coast and a property casualty insurance company with policies outstanding in the soon-to-be-affected area. No accrual for losses can be made until the hurricane hits because, until then, no losses have been incurred by the insurer. While the FASB and the International Accounting Standards Board have been contemplating changes to accounting for loan losses, including allowing expected future losses to be accrued, the incurred loss model continues to apply in the United States and in most of the rest of the world.

[1] FAS 5 refers to the original FASB pronouncement FAS 5, *Accounting for Contingencies*, which is included in the FASB Accounting Standards Codification (ASC) subtopic 450-20, *Contingencies: Loss Contingencies*.

[2] FAS 114 refers to the original FASB pronouncement FAS 114, *Accounting by Creditors for Impairment of a Loan*, which is included in the FASB ASC subtopic 310-10, *Receivables: Overall*.

[3] SOP 03-3 refers to the original AICPA pronouncement SOP 03-3, *Accounting for Certain Loans or Debt Securities Acquired in a Transfer*, which is included in ASC subtopic 310-30, *Loans and Debt Securities Acquired with Deteriorated Credit Quality*.

Reasonably estimable

Another point about FAS 5 is that even if the loss event, such as the hurricane, has happened, a loss should not be accrued until it can reasonably be estimated. For example, if a bank with a concentration of loans to companies in the energy industry sees a drastic drop in oil and gas prices in the last month of the quarter, it may be obvious that some borrowers will have suffered to the point of being unable to repay their loans. But whether the bank can estimate its losses likely depends on the type of loan, the borrower, and the normal time delay between loss events and the eventual discovery of which borrower has suffered and how badly. The bank may be tempted to book an accrual in the quarter in which the loss-causing event occurred, but it may not be able to reasonably estimate its loss. In this example, the bank should disclose the loss contingency and wait to make an accrual for the loss-causing event until it is able to reasonably estimate its loss.

Application to loans

Also, it is unfortunate that banks generally aren't able to turn on the weather channel to identify the loss-causing events affecting their loans. Further, mega events, like sudden, severe drops in commodity prices, are not the typical loss-causing events. The loss-causing events may be small and affect only one borrower (e.g., a loss of employment), or may be broader and affect many borrowers (e.g., the closing of a manufacturing facility), or may be broader still, affecting all borrowers, but to different degrees (e.g., a national recession). Loss-causing events may not be discovered by the bank until a borrower defaults on its loan, which often occurs weeks, months or even years after the loss-causing event. This gives rise to a need for loss-estimation methodologies that are based on what is observable and can be measured.

Loss-estimation methodologies

Various methods are employed to estimate the losses that have been incurred up through the date of the financial statements. The following describes a widely used method.

For many banks, the starting point in estimating the FAS 5 component of the allowance is the record of its historical charge-offs (including partial write-downs). Charge-offs result when losses on specific loans are confirmed and the uncollectible loan amounts are written off against the allowance. Over time, banks have developed rules of thumb to ease the process and make charge-off practices more consistent, such as charging off consumer loans when the loans becomes 180 days past due. Banks generally keep track, by loan type and borrower, of all charge-offs. Also, by relating the charge-off to the type of loan, risk classification and other characteristics of the loan prior to charge-off, the banks generally compute the rate at which loans of different types and characteristics are charged off. The chart below provides a simplified view of an FAS 5 allowance computation.

The simplest methodology would take the calculated average charge-off rate, expressed as a percentage of the loan type total balance per quarter or annual period, multiplied by the nonimpaired balance of loans held at the date of the financial statements; the resulting amount would be the allowance estimate. But refinements to the historical charge-off rate are usually needed for several reasons:

1. The historical charge-off rate reflects the period over which the charge-offs were confirmed and recognized, not the period over which the earlier losses occurred. That is, the charge-off rate measures the confirmation of losses over a period that occurs after the earlier actual losses. During the period between the loss-causing events and the eventual confirmations of losses, conditions may have changed.
2. There is always a time lag between the period over which average charge-off rates are calculated and the date of the financial statements. During that period, conditions may have changed.
3. The charge-off rates are just that: rates of charge-off over a period of time. Refinement of the methodology should be made for the estimated loss discovery period, that is, the average period between when losses occur and when the loans are written down as a result.

FAS 5 process

This paper is primarily concerned with the refinement that results from 1 and 2 above. This is the refinement of historical charge-off rates for the difference between the events and conditions that existed when the losses were occurring — thus giving rise to the charge-offs in the calculated rates — and the events and conditions that existed immediately prior to the date of the financial statements.

The graph below describes the typical situation. Charge-off rates are computed by averaging charge-off history over time (the "base period"). Some banks use a period of three years and some use one year, while others use a combination or "greater of" approach. But in all cases the historical base periods from which the charge-offs are taken lag the date of the financial statements. As a result of these lags, the average charge-off rates calculated often do not well represent the rate at which losses are occurring in the immediate period leading up to the date of the financial statements. For example, the average rate of charge-offs for the period AB in the graph is less than the rate of charge-offs at B, while the average rate for period CD is greater than the rate at D. The loss-causing events could be getting worse (as in period AB) or better (as in period CD) during the base period, but rarely will they be exactly the same during the base period as they are at the period end.

Also, as mentioned previously, the charge-offs (i.e., the loss confirmations) lag the actual loss-causing events, sometimes by months or years. The significance of this is that the measured charge-offs and rate of charge-offs are a reflection of the rate at which losses were incurred well before the date of the financial statements and often do not account for other factors that should impact the allowance estimate. It is for this reason that adjustment factors came into common use.

Adjustment factors

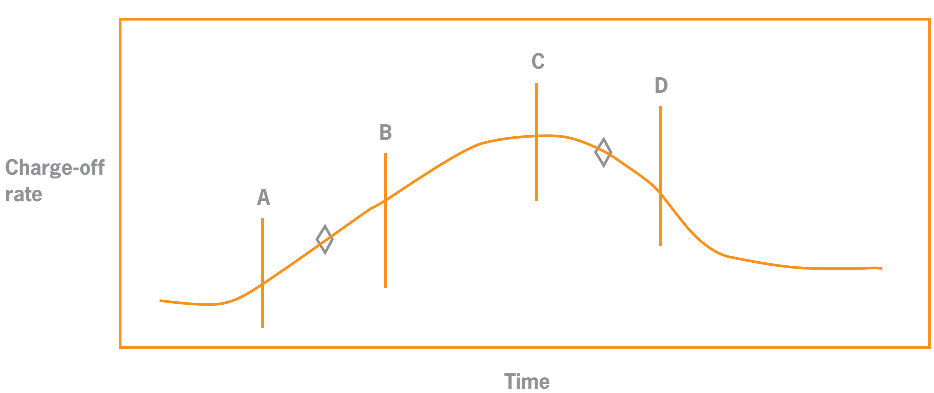
Essentially, adjustment factors are used in an attempt to adjust the average charge-off rates calculated over a historical base period for the difference between the conditions that existed when those losses were occurring and the conditions that exist at the date of the financial statements. Over time, the SEC staff and the bank regulatory agencies have developed lists of potential adjustment factors designed to consider a variety of factors that may cause a difference between the conditions that gave rise to the charge-offs in the base period and the conditions that exist at the date of the financial statements. The banking agencies have suggested some factors that include the following:

- Changes in lending policies and procedures
- Changes in national and local economic and business conditions
- Changes in the nature and volume of the portfolio
- Changes in the experience, ability, and depth of lending management and staff
- Changes in the trend of the volume and severity of past due and classified loans, and other trends
- Changes in the quality of the bank's loan review system and the degree of oversight by the bank's board of directors
- The existence and effect of any concentrations of credit, and changes in the level of such concentrations
- The effect of external factors such as competition, and legal and regulatory requirements

The SEC staff in Staff Accounting Bulletin No. 102, "Selected Loan Loss Allowance Methodology and Documentation Issues," suggests that adjustment for the following factors be considered:

- Levels of and trends in delinquencies and impaired loans
- Levels of and trends in charge-offs 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
- 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

Charge-off rate over time



2006 Interagency policy statement on the allowance for loan and lease losses

Estimated credit losses should reflect consideration of all significant factors that affect the collectability of the portfolio as of the evaluation date. Normally, an institution should 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. While historical loss experience provides a reasonable starting point for the institution's analysis, historical losses—or even recent trends in losses—do not by themselves form a sufficient basis to determine the appropriate level for the ALLL. Management also should 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, including but not limited to:

- 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 collectability 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; and
- 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 addition, changes in the level of the ALLL should be directionally consistent with changes in the factors, taken as a whole, that evidence credit losses, keeping in mind the characteristics of an institution's loan portfolio. For example, if declining credit quality trends relevant to the types of loans in an institution's portfolio are evident, the ALLL level as a percentage of the portfolio should generally increase, barring unusual charge-off activity. Similarly, if improving credit quality trends are evident, the ALLL level as a percentage of the portfolio should generally decrease.

It is important to note that the factors put forth by the banking regulators and the SEC are not meant to be an all-inclusive list, and there may be other factors that a bank should consider, based on its specific facts and circumstances. Also, not every suggested factor may be applicable at each reporting date.

With this understanding of how the base period charge-offs were derived and the purpose of the adjustment factors, certain conclusions can be drawn as to the significance of the adjustments needed:

1. The longer the charge-off rate base period, the more likely it is that conditions that existed during the charge-off rate base period would be different from the conditions at the financial statements date. Therefore, it is more likely that the significant adjustments will need to be made to the historical charge-off history starting point when a longer base period is used.
2. The longer the period between the loss-causing events and the resulting charge-offs, the more likely it is that conditions are different between the period during which losses were incurred and the financial statements date.
3. Depending on where the bank finds itself in the business cycle, the rate of losses in the base period may be lower or higher than the rate at which losses are occurring in the immediate period leading up to the financial statements. In other words, needed adjustment factors may be positive (increasing the historical average charge-off rate) or negative (decreasing the historical average charge-off rate). At times, this is referred to as having adjustment factors that are directionally consistent with events and conditions affecting the loan portfolio at the date of the financial statements.
4. As closely as possible, the adjustment factors should relate to the specific bank, its customers and the bank's specific economic environment. For example, basing adjustments on changes in local employment rates is preferable to basing adjustments on changes in national employment rates.
5. The correlation between some of the factors considered in the adjustments and charge-off rates could be measured over time, if the data were collected and analyzed. Tracking the correlation of the factors with observed charge-offs over two or three or more business cycles would guide the size of the adjustments and allow greater confidence in the adjustment factors.

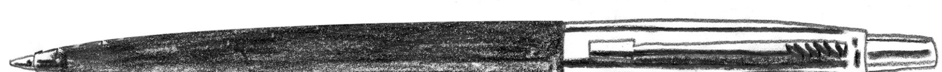
Common fallacies in the use of qualitative adjustment factors

The authors have seen numerous attempts to use adjustment factors improperly. Below are a few examples of how adjustment factors may be used improperly:

1. **The adjustment factor included was unnecessary.** This is often seen, for example, with respect to the "concentrations" and "nature and volume" adjustment factor. Whether an adjustment is needed to capture concentrations, nature and volume likely depends on the bank's approach for segmenting its loan portfolio. For example, a bank's commercial real estate portfolio may consist of segments of loans related to strip malls, hotels, office space and warehouses. Each of these segments has different risk factors, and the segment's percentage of the overall commercial real estate portfolio may change over time. Accordingly, if the bank computes and applies charge-off rates separately for each segment, an adjustment may not be necessary. Alternatively, an adjustment would be

needed if the bank computed a single charge-off rate for all commercial real estate loans because the global rate would not likely reflect current information, events and circumstances within the commercial real estate portfolio. For example, assume that within a loan type for which average charge-off rates are computed on a quarterly basis there is a variety of types of customers and loans represented. This might be the case for consumer loans, if this loan category includes, for example, credit card loans, installment loans, personal loans and other loans to consumers. At the beginning of the base period for measuring charge-offs (and the earlier period during which the loss-causing events were occurring), the amount of credit card loans in the consumer loan portfolio may have been much smaller than it is at the date of the financial statements. The growth in the concentration of credit card loans from, for example, 5 percent of the consumer loan portfolio to 30 percent might not be fully reflected in the average charge-off rate of the total consumer loan portfolio of the base period. A qualitative adjustment to the consumer loan portfolio charge-off rate may be entirely appropriate in that circumstance given the growth of the credit card portfolio within the total consumer loan category. However, if the bank has broken down the consumer loan portfolio into different loan types so that the historical charge-off rate is separately calculated for credit card loans and applied to the balance of such loans at each financial reporting date, there would be no need for an adjustment factor for the change in the concentration of credit card loans within the overall consumer loan portfolio.

2. **The adjustment factor included did not actually have any impact on loan losses.** For example, during the two weeks prior to the date of the financial statements, the bank made substantial changes to its personnel and underwriting policies. It is likely that eventually these changes will have an impact on losses and average charge-off rates, but they most likely did not have an impact on the losses incurred during the period leading up to the date of the financial statements.
3. **Certain factors suggested by the regulators and the SEC staff were included but were not relevant to the bank's loan portfolio in that period.** A common error is thinking that a bank must have an adjustment amount for each of the possible adjustments that the regulators and the SEC staff ask banks to consider. For example, one of the adjustment factors suggested by the bank regulators is to consider competition, and legal and regulatory requirements. At times, the authors have seen adjustments made to historical charge-off rates for these factors when they could have no conceivable impact on loan losses at the bank, much less reflect a difference in the rate of losses between the base period and the date of the financial statements. Another example is that an increase in local bank competition in isolation would not cause a difference between the loan losses of the base period and the loss rates leading up to the date of the financial statements unless the bank had lowered its underwriting standards in response to the competitive market when making the loans currently on the balance sheet.



4. **Duplication of adjustment for the same environmental factor.** Often the same event, condition or factor is used to justify more than one adjustment to the base period historical loss rates. As in the example above, if a factor is relevant, there should be one adjustment made for it, even if it might conceivably fall within the regulatory description of more than one adjustment.
5. **Added adjustment factor for uncertainty was included but unsupported.** The allowance estimate involves uncertainty. In fact, it is uncertainty that causes the need for the allowance in the first place. If the losses were fully known — borrower and amount — there would be no need for an allowance. The specific loans would be written down and the bad debt expense would be exact. The allowance exists because banks do not know the exact losses and must make an estimate based on limited current and historical information. Each step of the process of the typical methodology involves inherent uncertainty — the timing of charge-offs, the amount of charge-offs, the historical base period used, the nature of the adjustment factors and the loss discovery period. But after doing the best with each of these components, there should not be a need to pad the allowance with an unsupported adjustment factor for uncertainty. We believe that if there are known flaws and/or biases in any of the components of the methodologies, the answer is to fix those flaws and biases directly, not to throw a fudge factor into the mix.

Interagency Questions and Answers on Accounting for Loan and Lease Losses, Dec. 13, 2006

Question #16
How should an institution document and support the qualitative or environmental factors used to adjust historical loss experience to reflect current conditions as of the financial statement date?

Answer
As noted in the 2006 Policy Statement, institutions should support adjustments to historical loss rates and explain how the adjustments reflect current information, events, circumstances, and conditions in the loss measurements. Management should maintain reasonable documentation to support which factors affected the analysis and the impact of those factors on the loss measurement. Support and documentation includes descriptions of each factor, management's analysis of how each factor has changed over time, which loan groups' loss rates have been adjusted, the amount by which loss estimates have been adjusted for changes in conditions, an explanation of how management estimated the impact, and other available data that supports the reasonableness of the adjustments. Examples of underlying supporting evidence could include, but are not limited to, relevant articles from newspapers and other publications that describe economic events affecting a particular geographic area, economic reports and data, and notes from discussions with borrowers.

Management must exercise significant judgment when evaluating the effect of qualitative factors on the amount of the ALLL because data may not be reasonably available or directly applicable for management to determine the precise impact of a factor on the collectibility of the institution's loan portfolio as of the evaluation date. For example, the institution may have economic data that shows commercial real estate vacancy rates have increased in a portion of its lending area. Management should determine an appropriate adjustment for the effect of that factor on its current portfolio that may differ from the adjustment made for the effect of that factor on its loan portfolio in the past. It is management's responsibility to use its judgment to determine the best estimate of the impact of that factor and document its rationale for its best estimate. This rationale should be reasonable and directionally consistent with changes that have occurred in that factor based on the underlying supporting evidence previously discussed.

6. **The adjustment was a plug.** Some banks default to performing peer comparisons and basing allowance percentages on the allowances percentages observable at other banks. That is, an adjustment factor is justified as being the factor needed to cause the allowance ratio to be consistent with peer banks. A comparison of proposed allowance levels to that of peer banks is a useful step in the evaluation of the end results of applying the bank's methodology, but a bank cannot legitimately substitute use of the allowance percentages of other banks for the bank's own proper methodology, except in rare circumstances, such as with respect to a new loan type for which the bank has no historical experience.

Support for adjustment factors

Adjustment factors should be conceptually relevant, represent differences in loss rates expected at the date of the financial statements versus the historical base period rates, directionally consistent with the changes in credit risk in the loan portfolio, and supported with documentation. The SEC staff in SAB No. 102 states:

For any adjustment of loss measurements for environmental factors, a registrant should maintain sufficient, objective evidence (a) to support the amount of the adjustment and (b) to explain why the adjustment is necessary to reflect current information, events, circumstances, and conditions in the loss measurements.

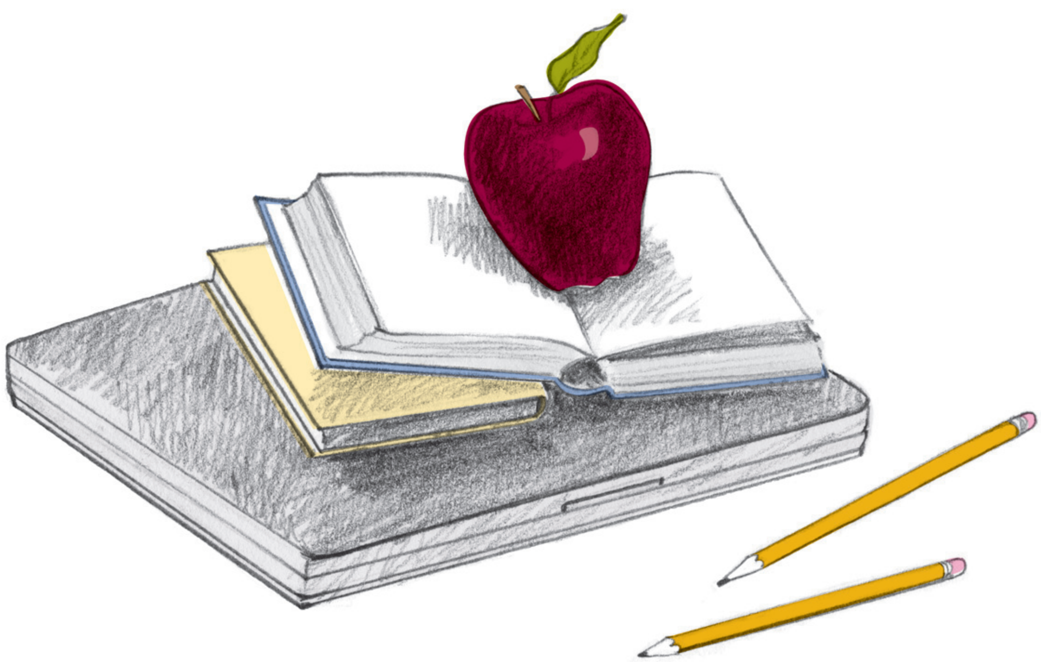
Consider, for example, a bank that uses a fairly long base period of three years (e.g., rolling 12 quarters) to compute its charge-off rates for each category of loans. During that period, there were no charge-offs for commercial real estate loans during the first eight quarters, and then charge-offs ramped up to a rate of 2.9 percent in the most recent quarter. During that same period, the loans, which had been conservatively underwritten with loan-to-value ratios no greater than 60 percent, have seen significant deterioration in collateral values, as evidenced by recent appraisals suggesting the portfolio has a current loan-to-value ratio of 125 percent. The bank proposes to add a 1 percent adjustment factor to the average historical charge-off rate of 0.62 percent, resulting in an adjusted charge-off rate of 1.62 percent. One might wonder whether the resulting loss estimate of 1.62 percent of the commercial real estate portfolio is a reasonable estimate of the incurred losses. It is directionally consistent with recent events, but is it enough? Shouldn't the fact that the charge-off rate in the most recent quarter was 2.9 percent be a sign that a loss estimate of 1.62 percent is not in the ballpark? The bank would be challenged to document support for the size of the adjustment factor and would need to relate the size of the adjustment to available objective evidence.

The point is that even when the adjustments upward and downward are conceptually sound and directionally correct, the amounts of the adjustments need to be supported with sufficient, objective evidence. Sources of support include, but are not limited to:

- published indices and information,
- historical experience,
- actual experience just prior to and after the date of the financial statements, and
- calculated adjustments based on past correlations between measureable factors such as local unemployment and median home prices, and subsequent charge-offs.

At times and for some adjustments, the basis for the adjustment is necessarily subjective and qualitative, not quantitative. But other adjustment could be based on past experience of the bank and observed relationships between environmental factors and losses that become evident from those conditions. Some banks argue that they don't have the data to calculate correlations, but then they never start collecting the data needed to eventually be able to calculate correlations. It is important that banks document the historical basis for adjustments that result in an allowance that reflects current information, events and circumstances. This documentation will result in management, the board and regulators having greater confidence in the adjustment factors used.

For example, a bank might calculate the relationship (correlation) over time between changes in local unemployment rates and loss on various types of consumer loans. Some correlations might be stronger than others. Where they are strong, the bank might use that experience — for example, that when the local unemployment rate increases above 5 percent for more than two quarters, credit card loan losses (as reflected in charge-off rates) increase by 20 percent in subsequent quarters — to make adjustments that are supported by such objective evidence. Another example might be the relationship between increases in loan-to-value ratios above 100 percent resulting in an expected percentage increase in loan losses or losses in the event of default. Using that historical relationship could provide objective evidence in support of needed adjustment factors.



In conclusion

Adjustment factors are important and generally needed components of the FAS 5 loan loss allowance estimation methodology, but they have to be understood and applied correctly, and they need to be supported by facts and information that are relevant to the specific bank and its loans.

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