# XII. ALLOWANCES FOR LOAN LOSSES

An assessment of the appropriateness of allowances for credit card loan losses is critical to the safety and soundness of banks and to the protection of deposit insurance funds. Allowance levels must be sufficient to absorb estimated credit losses[7] within the credit card portfolio. The term estimated credit losses means an estimate of the current amount of loans that it is probable the bank will be unable to collect; that is, net charge-offs that are likely to be realized for a loan or group of loans given facts and circumstances as of the evaluation date. Examiners are responsible for determining whether management has prudent controls in place to consistently determine the adequacy of the allowance in accordance with generally accepted accounting principles (GAAP), the bank's internal policies and procedures, and relevant regulatory guidance.

Examinations have revealed allowance methodologies that failed to adequately identify and provide for all uncollectible loans within the card portfolio. The deficiency has usually related to the level of estimated credit losses in loans that are current and in the portion of credit card balances comprised of fee and interest charges. Many credit card allowance methodologies inappropriately only focused on estimating credit losses in delinquent accounts instead of estimating credit losses in the entire portfolio. Other concerns have centered on over-reliance on historical loss rates without sufficient adjustment for current conditions and on unallocated allowances to offset weak allowance practices.

Methods to evaluate credit card allowances vary and are influenced by factors such as the bank's size, organizational structure, business environment and strategies, management style, card portfolio characteristics, administration procedures, and MIS. But, examiners should expect that all credit card reserving methods have certain common characteristics. They should be accurate, credible, adaptable, executable, and supportable, and should generally include:

- Detailed portfolio analyses, performed on a regular basis.
- Consideration of all loans, whether current or delinquent.
- For loans not reviewed on an individual basis, segmentation of the portfolio into groups of loans with similar risk characteristics for evaluation under FAS 5, *Accounting for Contingencies*.
- Consideration of all known relevant (internal/external) factors affecting collectibility.
- Consistent application but, when appropriate, modification for new collectibility factors.
- Consideration of the particular risks inherent in different kinds of card products.
- Consideration of collateral values (less costs to sell), where applicable.
- A requirement that analyses, estimates, reviews and other methodology functions are to be performed by competent and well-trained personnel.
- The use of current and reliable data.
- Written documentation with clear explanations of supporting analyses and rationale.
- Consolidation of the loss estimates via a systematic and logical method that ensures allowance balances are recorded in accordance with GAAP.
- Validation on a regular basis.

[7] Estimated credit losses should include accrued interest and other fees that have been added to the loan balances (and are not already reversed or charged-off) and that, as a result, are reported as part of the bank's loans on the balance sheet. A bank may include these types of estimated losses in either the ALLL or a separate valuation allowance, which would be netted against the aggregated loan balance for regulatory reporting purposes. When accrued interest and other fees are not added to the loan balances and are not reported as part of loans on the balance sheet, the collectibility of these accrued amounts should nevertheless be evaluated to assure that the bank's income is not overstated.

While the underlying objective is similar to assessing allowances in a commercial bank, the credit card industry has adopted very specialized techniques. And, in some cases, management and its external auditors have adopted interpretations of GAAP that might warrant close inspection. Furthermore, amounts provided for estimated credit card losses might include multiple components, including the Allowance for Loan and Leases Losses (ALLL), separate valuation allowances for uncollectible credit card fees and finance charges, and/or contra-asset accounts.

Examiners need to be familiar with these issues to determine whether allowance methodologies are appropriate and whether the resulting allowance levels are adequate to cover estimated credit losses in the entire card portfolio. The processes, methodologies, and underlying assumptions for allowances require a substantial degree of judgment. Because of the imperfect nature of most estimates of inherent loss and the fact that no specific method is appropriate for all situations or all banks, examiners ascertain whether management makes reasonable estimates based upon careful analysis of the credit card portfolio, ensures those estimates are established using sufficient and accurate data, and adjusts estimates based on current economic conditions and other relevant factors.

Marketing and underwriting strategies, as well as economic conditions, can substantially affect allowance adequacy because those factors give rise to unique performance patterns. As a result, examiners should look for evidence that management segments the card portfolio into as many components as is practical and meaningful to arrive at accurate allowance estimates. They should also determine whether management reviews allowance levels for adequacy at least quarterly (and more frequently when warranted) and maintains reasonable records to support its evaluations. Allowances established in accordance with appropriate guidelines should fall within a range of acceptable estimates. When allowances are deemed inadequate, examiners require management to increase current period provision expenses, or re-state past provision expenses, to restore reported allowances to an adequate level.

This chapter reviews key concepts for evaluating allowance adequacy, including accounting and regulatory guidance, policy expectations, common methodologies, considerations that should accompany a methodology, and validation expectations. It also discusses allowances for interest and fees, unallocated allowances, and allowances for unfunded loan commitments.

## ACCOUNTING GUIDANCE

For financial reporting purposes, including regulatory reporting, allowances and associated provision expenses for credit card loan losses are to be determined in accordance GAAP. GAAP does not permit the establishment of allowances that are not supported by appropriate analysis. Rather, it requires allowances to be well documented, with clear explanations of the supporting analysis and rationale.

Large groups of small-balance homogenous loans collectively evaluated for impairment, such as credit card loans, are not included in the scope of Financial Accounting Standards Board (FASB) Statement of Financial of Financial Accounting Standards (FAS) 114, *Accounting by Creditors for Impairment of a Loan.* Examiners should refer to FAS 114 for guidance in establishing allowances for credits that are reviewed individually and determined to be impaired (known as the line-by-line approach). FAS 5, however, is the main authoritative source for the accounting framework for reserving for credit card portfolios. FAS 5 provides the basic guidance for recognition of a **loss contingency** when it is probable that a loss has been incurred and the amount can be reasonably estimated (per paragraph 8 of FAS 5). FAS 5 does not permit accrual for loss events that are likely to occur in the future (have not yet occurred). Rather, the loss event must already have occurred as of the financial statement date (but the fact that the loss event has occurred might not yet be known).

Within FAS 5, paragraphs 22 and 23 address the collectibility of receivables, including credit card loans. According to those paragraphs, the conditions of paragraph 8 should be considered in relation to individual loans, or in relation to groups of similar loans, and accrual shall be made even though the particular receivables in which a credit loss has been incurred are not identifiable. Examiners should refer to the FAS 5 pronouncement for complete details. A variety of other implementing guidance is also available for review (bulletins, guides, and so forth). Examiners should assess management's application of FAS 5 in determining allowance adequacy for estimated credit card losses (for loans that are not reviewed individually for impairment and for loans reviewed individually that are not deemed to be impaired) and should determine whether management takes the risk of **unexpected losses** into consideration in assessing capital adequacy.

It is usually difficult to identify any single event that made a particular loan uncollectible. But, the concept in GAAP is that impairment of receivables should be recognized when, based on all available information, it is probable that a loss has been incurred based on past events and on conditions existing at the financial statement date. Delinquency status is not the only loss event. There are a variety of other loss indicators, such as, but not limited to, over-limit status, previous delinquency, re-aging history, insufficient funds history, and weak credit or behavior scores, which may be considered. In the case of a creditor that has no or limited experience of its own, reference to the experience of other entities in the same business may be appropriate.

The American Institute of Certified Public Accountants (AICPA) continues to work on a proposed Statement of Position (SOP) entitled Accounting for Credit Losses. The original proposal (2003) has been scaled back significantly and now focuses only on enhancing disclosures about credit quality and allowances. The AICPA is currently considering proposing that banks and other creditors would have to disclose provision expenses by loan type, type of borrower, geographic location, and so forth. Examiners must remain abreast of any forthcoming accounting guidance related to allowances for loan losses.

## REGULATORY GUIDANCE

Additional guidelines for reserving reside in several regulatory documents, including:

- *Interagency Policy Statement on the Allowance for Loan and Lease Losses* (December 1993) (FIL-89-93) (Interagency ALLL Policy).
- *Policy Statement on Allowance for Loan and Lease Losses Methodologies and Documentation for Banks and Savings Institutions* (July 2001) (FIL-63-2001). This policy statement is designed to supplement the 1993 policy statement.
- Call Report Instructions.
- Risk Management Manual of Examination Policies.
- *Interagency Expanded Guidance for Subprime Lending Programs* (January 2001).
- *Account Management and Loss Allowance Guidance for Credit Card Lending* (AMG) (January 2003).

The Interagency ALLL Policy requires that banks maintain an allowance at a level that is adequate to absorb estimated credit losses. It references FAS 5 and provides additional guidance. For pools of loans that are not individually reviewed and are not adversely classified, banks are generally required to carry allowances equivalent to the amount of estimated net credit losses over the upcoming 12 months. However, it footnotes that a charge-off horizon less than that may be appropriate for loan pools that are not subject to greater than normal credit risk, but only if the bank has conservative charge-off policies and if the portfolio has highly predictable cash flows and loss rates. Examiners are expected to review management's documentation on how the bank meets the exception requirement if it is maintaining allowances equivalent to a horizon less than 12 months.

Regulatory guidelines state that adequate allowances should be established for all loans (even if they are performing) and are consistent with FAS 5 requirements in that allowances must be established for groups of loans, even if the uncollectible loans are not individually identifiable at the current time. Regulatory guidelines also require additional allowances for potential volatility in loss rates, for imprecision that is inherent in any estimate of losses, for potential losses in loan commitments, and for possible increases in loss rates in the future. Unallocated allowances and allowances for unfunded loan commitments are discussed later in this chapter.

The *Expanded Guidance for Evaluating Subprime Lending Programs* requires examiners to perform specific evaluations of the allowances for subprime lending programs. It notes that the sophistication of management's analysis should be commensurate with the size, concentration level, and relative risk of the bank's subprime lending activities. It reiterates that the level of the allowance should cover estimated losses in accordance with both existing regulatory guidance as well as with GAAP. Further, it clarifies that, for pools of loans that are not adversely classified, the allowance should be sufficient to absorb at least all estimated losses over the current operating cycle (typically 12 months) and should consider historical loss experience, ratio analysis, peer group analysis, and other quantitative analysis.

The AMG requires banks to ensure that loan impairment analysis and allowance methods consider the loss inherent in both delinquent and non-delinquent loans. It also requires that banks ensure the allowance methodology addresses the incremental losses that may be inherent in over-limit accounts. If borrowers are required to pay a minimum payment that includes over-limit and other fees each month, roll-rates and estimated losses may be higher than indicated in the overall portfolio migration analysis (if that analysis is based on a less stringent minimum payment amount). The AMG also requires that management establish and maintain adequate allowances for each workout program. Management is expected to segregate workout program accounts to facilitate performance measurement, impairment analysis, and monitoring. In the case of multiple workout programs, each program should be tracked separately.

Examiners should refer to the actual documents for complete guidance as only brief overviews are offered in this manual. Overall, regulatory guidance is consistent with GAAP when requiring allowances sufficient to cover estimated credit losses in every segment of the credit card portfolio. Allowances should be established both for credit card loans that have an identified loss event, such as delinquency, and also for credit card loans that have other loss events that have occurred but that are not yet known to the bank.

Despite this consistency, certain situations may arise where differences in professional judgment will exist between regulators and the bank and its external auditors. But, estimates by each of these persons should generally fall into what is considered an acceptable range. When differences exist, examiners are encouraged, with the acknowledgement of management, to communicate with a bank's external auditors about rationale and findings. In case of controversy, FASB's Emerging Issues Task Force (EITF) Issue No. 85-44, *Differences between Loan Loss Allowances for GAAP and Regulatory Accounting Principals (RAP)*, may be referenced. The EITF addresses situations where regulators mandate that banks establish allowances under RAP that may be in excess of amounts recorded by the bank in preparing its financial statement under GAAP. Its consensus is that banks can record different allowances under GAAP and RAP but that auditors should be particularly skeptical in the case of GAAP/RAP differences and must justify those differences based on the particular facts and circumstances.

## COMPARISON TO BUDGETED LOSSES

When using the FAS 5 approach, banks may not include losses expected to be incurred that result from post-financial-statement date events including new accounts originated, new charges made to existing accounts, and build-up of fee and finance charges on existing accounts. During the (assumed) 12-month horizon, a portion of these new accounts, new charges, and fee build-up will flow to loss, but these losses represent amounts that were not a part of the portfolio balance as of the financial statement date for which allowance adequacy was assessed. However, a bank's total budgeted losses for the 12-month time horizon would include all losses regardless of whether the amount is included in existing balances as of the financial statement date or result from post-financial-statement date events. Thus, a bank often incurs higher losses during a given 12-month period than it has provided for in the allowance as estimated credit losses at the beginning of that horizon. Examiners should review differences between the allowance and budgeted losses for reasonableness, including discussing the variances with management.

## EXPECTATIONS FOR WRITTEN ALLOWANCE POLICIES

Banks use a wide range of policies, procedures, and control systems in allowance processes. Examiners are to determine whether written policies and procedures for the systems and controls for allowances are designed to ensure the bank maintains an appropriate allowance and are appropriately tailored to the size and complexity of the bank and its credit card loan portfolios. They should look for evidence that policies depict, in general:

- The roles and responsibilities of departments and personnel who determine or review allowances to be reported in financial statements.
- Accounting policies and practices, including those for charge-offs, recoveries, and collateral valuation.
- The description of the methodology, including what segmentation is used and how the methodology is consistent with accounting policies.
- The system of internal controls used to ensure that the allowance process is maintained in accordance with GAAP and supervisory guidance.
- Validation responsibilities and procedures.

## METHODOLOGIES

An allowance methodology is a system that a bank designs and implements to reasonably identify estimated credit losses as of the financial statement date. Similar to traditional commercial banks, banks with credit card portfolios typically incorporate segmentation to determine needed allowances. However, the segmentation for credit card portfolios generally is not related to classifications or internal loan grades. Instead, delinquency status is usually the primary segmentation tool, although some banks use behavior scores, credit scores, or other segmentation techniques. Banks commonly use one or more of the following methodologies:

### *Roll-Rate Models*

The roll-rate methodology predicts losses based on delinquency. While readily adaptable to credit card operations, most roll-rate methodologies assume that delinquency is the only loss event and that significant allowances are not needed until a loan becomes delinquent. Roll-rate methodologies are also known as migration analysis or flow models.

There is not a standard roll-rate model that is used throughout the industry, but most of these types of models are based upon the same principles. The credit card portfolio is segregated into delinquency buckets. Once segregated, the percentages of receivables that migrate to more severe delinquency buckets are measured, usually each month, and are referred to as roll-rates. Management considers roll-rates for the current month, current quarter, or an average of several months or quarters. Normally, it uses averages as a smoothing technique. Management may also track portfolio performance for several months to arrive at a weighted average distribution in each delinquency bucket. The time period used to arrive at this weighted average distribution should be long enough to have a smoothing effect on the loss seasoning curve.

Once roll-rates are determined, they can be applied to outstanding receivables within each bucket. The resulting balances are rolled through the delinquency stages based on the roll-rate for each stage and the end results are aggregated to arrive at the required allowance level. In some cases, loss factors (also known as roll-to-loss rates) are calculated by multiplying the roll-rates from each delinquency bucket forward through loss. The resulting loss factors are applied to the existing receivables in the applicable delinquency bucket and the end results are aggregated to arrive at the required allowance level. Exhibit A illustrates roll-rate and loss-factor concepts in an abbreviated, non-averaged fashion.

Exhibit A

| Month | Current Balance | 30 Days | Current-to-30 Roll-Rate | 60 Days | 30-to-60 Roll-Rate | 90 Days | 60-to-90 Roll-Rate | Current-to-Loss Factor |
|---|---|---|---|---|---|---|---|---|
| Oct. | $1,000 | $39 | | $12 | | $ 9 | | |
| Nov. | $1,100 | $40 | 4.0 % | $15 | 38.5 % | $10 | 83.3 % | 1.28% |
| Dec. | $1,250 | $50 | 4.6 % | $20 | 50.0 % | $12 | 80.0 % | 1.84% |
| Jan. | $1,200 | $65 | 5.2 % | $28 | 56.0 % | $17 | 85.0 % | 2.48% |

In Exhibit A, the 4.0 percent roll-rate for the current-to-30-day roll in November is calculated by dividing the 30-days delinquent balance for November ($40) by the current balance of the prior month ($1,000 in October). To calculate the 38.5 percent 30-to-60-day roll in November, the $15 balance that is 60 days delinquent in November is divided by the $39 balance that was 30 days delinquent in October. The 1.28 percent current-to-loss factor for November was figured by multiplying the roll-rates through charge-off (which for purposes of this example is assumed to be 90 days), or 4.0 percent x 38.5 percent x 83.3 percent. The example current-to-loss factors in Exhibit A are calculated moving straight across the table due to the limited table space available coupled with the aspiration to provide more than one example. Most often, though, roll-to-loss factors are calculated on the diagonal (for example, 4.0 percent X 50.0 percent x 85.0 percent).

The roll-rates assume that is the percentage of receivables that rolled from one bucket one month into the next bucket the following month. In reality, a delinquency bucket can contain:

- Accounts that rolled forward from an earlier-stage bucket in the prior month.
- Accounts that were in the same bucket last month (they may have paid but not enough to roll-back). These are sometimes called pay-and-stay accounts.
- Accounts that rolled back from a later-stage bucket because of payment or other considerations.

While the last two points may seem contradictory to the flow-to-loss concept that is being tracked, all accounts must be captured in the analysis. Again, examiners are reminded of the imprecision inherent in all loss predicting models. Over time and despite these apparent anomalies that may exist, the roll-rate method has proven fairly effective in estimating losses in delinquent accounts.

However, the method is less effective at providing an estimation of loss exposure in the loans that are not delinquent (which in most cases represents a majority of total loans) unless management includes some other approach for estimating losses in the performing segment of

the portfolio. As depicted in Exhibit B (on the following page), a simple, un-augmented roll-rate methodology generally derives an allowance balance that may cover a horizon of only six or seven months (one month for each delinquency bucket) with nominal coverage for current loans.
Exhibit B

| *Delinquency Status* | *Allocation* | *When Loss is Recognized* |
|---|---|---|
| 180 + | 100% | Immediately |
| 150-179 | Derived from roll-rates | Next month |
| 120-149 | Derived from roll-rates | Month 2 |
| 90-119 | Derived from roll-rates | Month 3 |
| 60 – 89 | Derived from roll-rates | Month 4 |
| 30 – 59 | Derived from roll-rates | Month 5 |
| 1 – 29 | Derived from roll-rates | Month 6 |
| Current | Must be determined | Month 7 and beyond |

One reason that roll-rate models are less predictive for current accounts is that it is very difficult to estimate the balance of current accounts over the 12 month horizon, particularly when considering FAS 5 and trying to avoid the inclusion of new accounts and new charges. The balance of the current bucket often increases on historical roll-rate reports (even though some accounts are rolling out of it and into delinquency) because of:

- The origination of new accounts or new purchase and cash advance activity.
- The roll-back of accounts from delinquency into a current status due to payment on the account.
- The roll-back of accounts from delinquency into a current status due to other considerations, such as re-aging. Re-aging affects the normal migration of accounts, so verification that the volume of re-aged accounts does not materially affect the delinquency rate, normal charge-off rates, and accordingly the adequacy of allowances, is in order.

In addition, the predictive ability of roll-rates declines in the later months of the horizon because there is a lag in accounting for underlying changes in portfolio quality, especially in the relatively large current bucket. As such, when these changes cause portfolio quality to worsen, the roll-rate analysis might end up underestimating credit losses.

To address these concerns, there are a variety of ways that management analyzes the collectibility of performing loans. Some consider factors such as over-limit status, recent re-age history, workout status, utilization (usually stratified into buckets or ranges), the presence of certain status codes (such as frozen or closed), behavior scores or credit bureau scores, and age of the account. Some banks use an approach that is based on a calculation of historical loss rates for similar loans. The bank calculates actual annual loss rates for current loans over the past 12 months (perhaps stratified by score) and applies those loss rates against the applicable outstanding balances of current loans.

Roll-rates sometimes evidence aberrations due to a variety of factors (some of which are consistent with the bullet points in the Considerations to Accompany a Methodology section). Examiners should expect management to be able to explain any significant aberrations in roll-rates as well as how it is addressing those aberrations in the methodology.

Roll-rate methods and reporting continue to evolve. For example, management now usually conducts roll-rate analysis for each portfolio segment. Also, roll-rate methods frequently had been based on gross balances, but more recently, banks are developing roll-rate models that track principal balances and separately track fee and interest balances in an effort to better understand charge-offs and the associated allowances that are necessary. For subprime credit card loans, a large portion of the final loss amount usually consists of fees and interest. Some subprime lenders use unit roll-rates instead of dollar roll-rates to remove the inflation effect caused by interest and fee accruals in the later delinquency buckets. The units are converted to dollars at some point in the calculation. Using units in the methodology is not a problem, but the examiner should ensure that this added step does not somehow cause an understatement of estimated credit losses. It would generally only be appropriate to use units if the portfolio is very homogeneous and all accounts have roughly the same balance and risk profile. Also, if interest and fees are removed from the analysis, the methodology will need a separate calculation for those items. Fee and interest allowances are discussed later in this chapter.

### *Average Charge-Off Method*

The average charge-off method is a simplified approach that generally is used to supplement other methodologies. The average charge-off method provides an estimate of annual charge-offs based on past performance. Both monthly charge-offs and monthly outstanding receivable balances for a specific time period are collected and averaged to calculate the charge-off ratio. The time period chosen is usually three months, six months, or longer, but should be long enough to smooth out any impacts from significant growth factors, changes in underwriting or lending practices, deteriorating trends in the volume of past due credits, and changes in current local and national economic conditions. This smoothing reduces dramatic, temporary shifts in the level of estimated allowance requirements. To arrive at an estimate of annual projected charge-offs, the outstanding receivables balance is multiplied by the average charge-off ratio.

This method is also generally easy to apply when the portfolio is divided into subgroups (historical loss rates for the applicable segment would be applied against the segment). For example, historical loss rates by credit score band could be tracked and applied to the outstanding balance of each band on the date of evaluation. The portfolio could be segmented many ways, including behavior score or vintage (age). Other advantages are that the data needs are relatively modest.

A weakness in this approach is that it assumes that future loss rates will be similar to historical experience. The judgmental nature of the process also introduces potential bias if forecasters rely on longer-run averages when conditions are deteriorating and on short-run trends at the earliest signs of recovery, either of which results in lower loss estimates. Examiners should assess management’s use of averages to ascertain the impact that the selected averaging periods may have on the level of allowances.

### *Vintage Analysis*

With vintage analysis, projected losses are determined based upon the age of accounts. This approach helps to eliminate the distortion caused by rapid growth and the credit card loss curve. Typically, only nominal losses are incurred during the first six months after a vintage is booked. However, months 7 through 9 often have the highest loss rates, followed by a gradual declining trend in months 10 through 15. A lot of vintages reach some sort of stabilized loss rate somewhere around month 18. Thus, accounts that will be aging through the highest point of the loss curve in the near future would probably require the highest allocation while accounts in the later vintages would normally require lower allocations. Loss curves vary depending on the quality of underlying accounts and should be reviewed on a case-by-case basis. Normally prime portfolios experience peak losses later than subprime portfolios.

Patterns or curves are generally predictive for future vintages, provided adjustments are made for changes in underwriting criteria, line increases, economic conditions, and so forth. Examiners should assess management’s practices for adjusting loss estimates promptly when the performances of new vintages deviate markedly from past curves and trajectories or if other changes, either internal or external, occur.

### *Regression Analysis*

Regression analysis uses national economic data such as unemployment and bankruptcy rates, the retail sales to personal income ratio, and the consumer debt-to-income ratio. The models also use internal data such as behavior score distributions and delinquency rates. The information is synthesized by trained statisticians to forecast loss rates. However, before employing a loss estimation model that is based on regression analysis, management should evaluate and modify, as needed, the model's assumptions to ensure that the resulting loss estimate is consistent with GAAP. In order to demonstrate consistency with GAAP, banks that use loss estimation models typically 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. Because of the complexity of the models and the need for highly-trained personnel, regression analysis is not widely used.

### *Portfolio Liquidation Method (or Payment Turnover Method)*

The portfolio liquidation or payment turnover method calculates an allowance amount equal to estimated charge-offs over the estimated average life of the credit card portfolio balance. Management uses one or more of the other common methods to calculate estimated credit losses for the next 12 months. It then adjusts the figure downward based upon its assumption that the average life of a credit card balance is less than 12 months. If a bank is using turnover to support an allowance level significantly below a 12 month equivalent, examiners should carefully review the related documentation. Turnover is not directly addressed by GAAP or regulatory guidelines, and careful consideration should be given to the factors discussed in the Considerations to Accompany the Methodology section.

Management often contends that credit card balances have a very short life, even if the account has a longer life. Some banks calculate the average life of a revolving receivable by simply dividing total receivables by aggregate gross monthly payments. This approach assumes that each payment received would probably extinguish a sizable portion of the original balance, even though subsequent principal advances are often being made on the same credit card account and fees and interest charges are typically absorbing much of the payment. The average life of a receivable extends, however, when it is calculated by using a netting approach in which the original loan balance is considered paid down only to the extent that payment is greater than subsequent principal advances and interest and fee accruals. The netting of payments and subsequent charges assumes that risk is not extinguished until the loan has been paid off and that risk is not declining proportionally to the gross payment amount. Because the **payment hierarchy** typically applies payments to fees and interest charges first, the capitalized balance on the account does not really turnover as quickly as the non-netting approach would imply.

## CONSIDERATIONS TO ACCOMPANY THE METHODOLOGY

Examiners should determine whether estimated credit losses reflect consideration of all significant factors that affect the card portfolio's collectibility as of the evaluation date. While historical loss experience provides a reasonable starting point, historical losses, or even recent trends in losses, are not by themselves, a sufficient basis to determine an adequate allowance. Examiners should also assess whether management considers any factors that are likely to cause estimated losses to differ from historical loss experience, including, but not limited to:

- Changes in lending policies and procedures, including underwriting, collection, charge-off, and recovery practices.

- Changes in local and national economic and business conditions.
- Changes in bankruptcy rates.
- Changes in the volume or type of credit extended.
- Changes in the experience, ability, and depth of lending management.
- Changes in the volume and severity of past due, nonaccrual, workout, adversely classified, or similar loans.
- Changes in the quality of the loan review system or the degree of oversight.
- The existence of, or changes in the level of, any concentrations of credit.
- The accuracy of credit scoring or other scoring systems used.
- The effect of external factors such as competition and legal and regulatory requirements.

The review of the written allowance analysis is aimed at determining whether it adequately documents the factors considered in evaluating the portfolio, including, but not limited to:

- Portfolio segmentation methods.
- Loss estimation techniques and assumptions.
- Definitions of ratios and model computations.
- Baseline loss information used.
- Rationale for adjustments to historical experience.
- A comparison of estimated credit losses as of a financial statement date to actual subsequent charge-offs, with significant variances explained (often referred to as back-testing).

### *Ratio Analysis*

Use of ratio analysis as a supplemental check for evaluating the overall reasonableness of allowances is encouraged. However, ratio comparisons are not, by themselves, a sufficient basis for determining an adequate allowance level and do not eliminate the need for a comprehensive analysis of the loan and lease portfolio and the factors affecting its collectibility. Examples of common ratios and their uses include:

- *Allowance to Total Loans and Leases (correspondingly Credit Card Allowance to Total Credit Card Loans)* – Differences among banks in the composition of loan portfolios, in underwriting and collection policies and practices, and in charge-off practices make comparison of this ratio among banks an unreliable indicator of allowance adequacy. But, an upward or downward trend in this ratio for an individual bank suggests a need for further investigation as to why the relationship is changing.
- *Allowance to Net Losses (correspondingly Credit Card Allowance to Net Credit Card Losses)* – For the reasons listed in the prior bullet point, comparing this ratio among banks is also unreliable. Even within a bank, charge-off rates may vary widely from year-to-year, and comparisons of the relationship between the bank's current allowance and short-term averages of its net losses could be misleading. If the bank's allowance has been stable or declining, while its net loan losses have been trending upward, the adequacy of the allowance may be suspect.
- *Earnings Coverage of Net Losses (correspondingly Credit Card Portfolio Earnings Coverage of Net Credit Card Losses)* – Regardless of whether earnings are sufficient to cover losses and replenish the allowance, situations in which the bank’s annual net charge-offs substantially exceed the allowance balance should be inspected.
- *Recoveries to Average Total Loans and Leases* ratio and *Recoveries to Prior-Period Losses* ratio (correspondingly *Credit Card Recoveries to Average Credit Card Loans* ratio and *Credit Card Recoveries to Prior-Period Credit Card Losses* ratio) – These ratios are affected by the bank's charge-off policy because quicker charge-off practices typically result in higher recovery rates, while low recovery rates might be a sign that the bank is

slow to charge-off losses. The ratios provide little information relating to the adequacy of the allowance (other than the potential reasonableness of recovery assumptions used in the allowance methodology), but gives some insight into whether, and how effectively, the bank works to recover on its charged-off loans.

### *Layering*

**Layering** of allowances is inappropriate. Layering happens when a bank includes a loan in one segment, determines its best estimate of loss for that loan (either under FAS 114 or on a group basis under FAS 5), and then includes the loan in another group that receives an additional allowance amount. Loss estimates from both accounting methods (the line-by-line approach under FAS 114 and the group approach under FAS 5) must be consolidated to determine the appropriate level of the allowance but, double counting by applying FAS 114 and FAS 5 to measure the same loss in the same loan again is inappropriate. As such, management must ensure that groups of loans appropriately exclude individual reviewed loans that are deemed to be impaired and have had individual allowances established in accordance with FAS 114.

### *Ownership Interests*

Banks are not permitted to hold loan loss allowances against loans that have been sold or otherwise transferred off the balance sheet. Instead, consideration of securitization in allowance calculations usually involves ensuring that the performance of the securitized accounts is not unduly influencing the allowance levels held by the bank. Many methodologies are based on managed roll-rates, and, as such, require adjustment for the securitized loans. Examiners should determine how the risk profile of the owned loans compares to that of the securitized loans (or similarly to other loans issued by the bank but held elsewhere, such as through Rent-a-BINs). It is not uncommon for the sold receivables to perform differently, and in many cases, better than those retained by the bank. In these situations, it is inappropriate for a bank to use managed portfolio performance in assessing necessary allowance amounts for owned loans. Generally, allowance calculations should segment managed receivables into different ownership interests to isolate the performance of each of the segments. Banks must account for the owned portion of accrued interest and fees, including the associated estimated losses, separately from the retained interest in accrued interest and fees related to securitized credit card receivables.

### *Settlements*

The AMG addresses allowances for settlement accounts. Management is to establish and maintain adequate loss allowances for credit card accounts subject to settlement arrangements. The amount of debt forgiven in such an arrangement should be charged-off immediately, but if impractical, banks may instead treat the forgiven amount as a specific allowance, which should be reported in the same manner as an actual charge-off.

## PURIFICATION AND ALLOWANCES FOR INTEREST AND FEES

At the time of charge-off, most credit card banks charge only a portion of the gross loss against the ALLL. That portion generally relates to the principal balance of the credit card loan. The remaining amount, which consists of fees and interest, is charged directly to the income statement and not to the ALLL. The process is called purification and generally does not occur on a loan-by-loan basis. Instead, management usually performs a study to make an estimate of the typical amount of interest and fees. These average percentages are then used for all similar credit card loans. Most methodologies are designed to predict gross losses, with a subsequent adjustment for purification that will derive estimated principal losses.

The Call Report specifies that in determining estimated credit losses, management must evaluate the collectibility of the loan portfolio, including any recorded accrued and unpaid interest. Call

Reports require banks to report the gross amount of loan losses, including those balances that have been purified. These gross loss amounts need to be adequately provided for either in the general ALLL or a combination of the general ALLL and separate allowances for estimated losses on capitalized fee and interest charge accruals. Failure to establish appropriate allowances for uncollectible fees and interest charges can result in a material overstatement of capital levels. The *Expanded Guidance for Subprime Lending Programs* clearly states that estimates of credit losses should include accrued interest and other accrued fees that have been added to the loan balances. For subprime banks, this amount is likely to be significant.

Per the AMG, the owned portion of accrued interest and fees must be accounted for separately from the retained interest in accrued interest and fees related to securitized card receivables.

## UNALLOCATED ALLOWANCES

Banks are required to consider qualitative factors in the credit card loss estimate analysis, but this generally is part of an overall disciplined approach and not as part of developing a cushion to prevent fluctuations of income. Although establishing allowances that are labeled under "unallocated" is a long-standing practice in the industry, the term "unallocated" is not defined in GAAP. In some cases, the creation of unallocated allowances has been based on the premise that unexpected conditions could cause losses to exceed estimated credit losses. However, banks should not carry unallocated allowances that have been established for this reason because an unallocated allowance is appropriate only when it reflects an estimate of probable losses, determined in accordance with GAAP, and is properly supported. In this regard, the risk of unexpected losses should be covered by equity capital, not by the allowance.

There are cases, however, where unallocated allowances may be appropriate. Specifically, there are events that are known to have occurred that can reasonably be expected to cause future charge-off rates to exceed the level derived by the quantitative methodology. Several qualitative factors could be considered, including these examples:

- Economic Conditions - In a period of economic weakness, it may be appropriate to carry additional allowances to offset the likelihood that future loss rates will exceed historical levels.
- Material Change in Business Plan, Policies, or Practices - For instance, entry into a new or potentially risky market segment or a change in account management or collection strategies that might affect roll-rates could warrant additional allowances.
- Change in Portfolio Composition - If the methodology is based on historical experience, events or conditions that could cause future results to be different should be considered. For instance, additional allowances may be necessary if:
    - The bank is aggressively adding new accounts because new accounts generally have much higher loss rates.
    - Line increase programs have raised the average balance.
    - Deterioration in credit or behavior score distribution is noted.
    - Portfolio acquisitions are materially impacting portfolio performance.

These are just a few examples of possible conditions that might warrant unallocated allowances. A close relationship sometimes exists between adjustments that management makes to roll-rates or other predictors in the methodology and other adjustments that it makes for unallocated allowances. Management is expected to carefully document its assumptions used, both for changes made to specific predictors and for any amounts set aside as unallocated allowances.

## ALLOWANCES FOR UNFUNDED LOAN COMMITMENTS

Probable credit losses associated with unfunded loan commitments should be accrued and an allowance for off-balance sheet credit exposures recognized as a liability (and not part of the

ALLL) when the conditions in FAS 5 are met. Normally, banks determine the adequacy of credit card allowances based on outstanding credit card receivables rather than on committed credit lines. However, management is responsible for determining whether probable losses related to undisbursed funds exist and for estimating the amount of any liability that is needed. Examiners ordinarily do not take exception to management's conclusion that the FAS 5 conditions for accrual of a loss have not been met, and therefore no liability is needed if an effective monitoring and control system identifies deteriorating credits at an early stage and freezes, cancels, or reduces those lines in a timely manner. Many banks with credit card portfolios do not record a liability for loan commitments premised on the ability to cancel commitments within a relatively short timeframe. Also, in many subprime portfolios high utilization rates result in relatively small loan commitments or available credit amounts.

## VALIDATION

Banks are required to validate the allowance methodology, as depicted in the *Policy Statement on Allowance for Loan and Lease Losses Methodologies and Documentation for Banks and Savings Institutions*. The methodology is only considered valid when it accurately estimates the amount of loss contained in the portfolio. As such, the methodology should include procedures that adjust loss estimation methods to reduce differences between estimated losses and actual subsequent charge-offs as needed. Examiners should determine whether the bank's policies and practices include procedures for a methodology review by a party who is independent of the loss estimation process, methodology, and its applications. Examples of practices that banks employ when validating the methodology include:

- Reviewing trends in loan volume, delinquencies, restructurings, and concentrations.
- Reviewing charge-off and recovery histories, including an evaluation of the timeliness of the entries to record both the charge-offs and the recoveries.
- Reviewing, on a test basis, source documents and underlying assumptions.
- Evaluating the appraisal process of any underlying collateral.

Management usually supports the validation process with workpapers from the review function. Additional documentation often includes the summary of findings of the independent reviewer. If management changes the methodology based on findings of the validation process, it should maintain documentation that describes and supports the changes.

As a simple validation test, examiners could compare the allowance on any given date against actual charge-offs that were recorded over a subsequent 12-month horizon. Significant differences would need further investigation, and examiners should look to management to explain differences between estimated losses used in determining the allowance and actual charge-offs taken. If management claims the difference is due to the build-up of fees and interest charges and charge-offs on new accounts opened subsequent to the financial statement date considered, examiners should review management's supporting documents to confirm whether this is actually the case.

## SUMMARY OF EXAMINATION GOALS – ALLOWANCES FOR LOAN LOSSES

The determination of appropriate credit card loss allowances requires examiners to thoroughly review documentation to ensure that the methodology is comprehensive and appropriately considers the bank's loss experience and current conditions. Examiners should:

- Consider the quality of the bank's review system and management in identifying, monitoring, and addressing asset quality problems.
- Assess management's allowance evaluation process, including the assumptions used. Determine whether all significant factors that affect the collectibility of the portfolio are appropriately considered.

- Review the overall level of allowances and the range of estimated credit losses for reasonableness in regards to the various factors discussed in this chapter.
- Perform quantitative analyses (several are noted in this chapter) as a check for reasonableness and determine the reasons for any differences between the results of the analyses and the bank's allowance.
- Review the adequacy of documentation maintained for supporting the appropriateness of allowance levels. This should include documentation of validation processes and findings.
- If necessary, independently prepare a variety of evaluation approaches which can be used to develop a range of estimated losses and comparative analyses.
- As necessary, discuss differences with management and the bank's external auditors.