

THE COMPLETE GUIDE TO THE ALLL

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OVERVIEW

The estimation of the allowance for loan and lease losses (ALLL) has been a part of the financial institution's accounting processes for a long time, but it has taken on increased importance over the last several years. Between increased regulatory scrutiny and the challenges of documenting and defending the allowance estimation to multiple constituencies (including regulators, external auditors and the board), many financial institutions find themselves overwhelmed with the process of estimating and documenting the ALLL on a monthly or quarterly basis.

Tom Ryan of Turner and Associates, Inc., a bank consulting firm serving clients in the Midwest, sees this in practice, noting: “Estimating the allowance for loan and lease loss is one of the most important challenges bankers face today, though often the least understood.”

By adopting a supportable and consistently applied methodology and providing verifiable documentation of their findings, bankers can minimize the inherent imperfections of this estimate, Ryan says.

This comprehensive guide to the ALLL:

- Introduces key concepts of the ALLL.
- Highlights challenges associated with estimating the ALLL and offers suggestions for addressing those challenges.
- Describes methodologies for determining FAS 5 and FAS 114 reserves, including approaches to qualitative and environmental factors.
- Outlines the pros and cons of migration analysis as a method of determining historical loss experience for FAS 5 pools.
- Provides tips on supporting changes to the ALLL.

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- Explains new disclosure reporting requirements and how to meet them.
 - Gives an in-depth-description of changes related to the FASB's proposed new "Current Expected Credit Losses" model and contrasts it with IASB's proposed credit deterioration model.

If you have any questions on terms used throughout this e-Book, visit our [ALLL glossary](#).

1. INTRODUCTION TO THE ALLL

Originally referred to as the “reserve for bad debts,” the allowance for loan and lease losses, ALLL, is a valuation reserve established and maintained by charges against an institution’s operating income. It is an estimate of uncollectible amounts used to reduce the book value of loans and leases to the amount that is expected to be collected.

A financial institution’s ALLL methodology is a system designed and implemented by an institution to estimate reasonably its loan and lease losses as of the financial statement date. The FDIC says that it is critical that ALLL methodologies incorporate management’s current judgments about the credit quality of the loan portfolio through a disciplined and consistently applied process. An institution’s ALLL methodology is influenced by institution-specific factors, such as an institution’s size, organizational structure, business environment and strategy, management style, loan portfolio characteristics, loan administration procedures, and management information systems.

To account for loans and the reserves they require, institutions separate loans into two distinct groups. These two groups of loans are named after the regulations prescribing them: Accounting Standards Codification Subtopic 310-10 and Accounting Standards Codification Subtopic 450-20.

These are more commonly abbreviated as ASC 310-10 and ASC 450-20.

Loans that are impaired are included with the ASC 310-10 group, also known as FAS 114 loans because the regulatory guidance had formerly been known as the Financial Accounting Standards No. 114. These loans are evaluated individually to find the proper reserve needed.

Loans that are not impaired are included in ASC 450-20, also known as FAS 5 loans (because the former regulatory guidance was Financial Accounting Standards No. 5). According to the guidance, FAS 5 loans are not individually evaluated. These loans are placed into groups, or pools, of non-impaired and/or homogeneous loans grouped together based on similar risk characteristics.

Many of the difficulties with the ALLL come from deciding in which group to place loans and how to perform the calculations necessary for each type of analysis.

Note: Throughout this book, we will use FAS 5 and FAS 114 to refer, respectively, to the pooled loan and impaired loan estimations in the ALLL, despite the more recent Accounting Standards Updates 450-20 and 310-10, since the former names are still most commonly recognized by our readers.

2. CHALLENGES IN THE ESTIMATION OF THE ALLL

One of the defining regulatory statements on the ALLL, the 2006 Interagency Policy Statement on the allowance for loan and lease losses, states:

The ALLL represents one of the most significant estimates in an institution's financial statements and regulatory reports....Each institution has a responsibility for developing, maintaining, and documenting a comprehensive, systematic, and consistently applied process for determining the amounts of the ALLL and the provision for loan and lease losses.

The ALLL estimation is significant in that regulators are vigilant about ensuring that financial institutions have enough in their reserves, but the ALLL estimation is also significant for its impact on an institution's earnings and capital. As a result, the ALLL and how it is derived is scrutinized not only by regulators but also by boards and others within the financial institution.

At the same time, the process of ALLL estimation itself is fraught with challenges related to the need for something that is comprehensive, systematic and consistently applied. Some of these challenges include:

1. The manual, time-intensive nature of the process each month or quarter. For many financial institutions, the process can consume several days, if not more, per month for several of the institution's finance, credit and/ or lending staff. Some individuals involved are high-level executives whose time is at a premium, so directing a great amount of time towards the ALLL can pose a burden. The process of gathering data from disparate sources is labor-intensive, manual and often prone to error. The common reliance on an assortment of spreadsheets to build the estimate can mean staff are often combating formula errors and version-control issues, among other potential problems.

2. Keeping up with new accounting standards and regulatory demands that are being placed on the institution.

The financial institution must stay current not only with the published general regulatory guidance but also with new accounting standards being issued from the FASB. In addition, the institution's specific regulators have another set of demands that may or may not coincide precisely with the aforementioned standards.

3. Additional reporting and disclosure requirements.

In recent years, the FASB has continued to issue new requirements for reports and aggregation of data through its Accounting Standards Updates. While this often consists of simple reports and the manipulation of data that is already being gathered, the changes can be time-consuming and place additional strain on limited resources.

4. Ensuring an appropriate methodology to determine the FAS 5 reserves. This can include questions surrounding the appropriate segmentation of the FAS 5 pools, assumptions used for the number of periods of historical data to include for establishment of the Historical Loss Reserve portion of the FAS 5 reserves, and the judgment and defense of qualitative factor adjustments in the assessment of the FAS 5 reserves.

5. Ensuring an appropriate methodology for the FAS 114 reserves, using accurate impairment analysis methods and producing documentation to justify and defend the methodology. This includes questions about how to determine appropriately which loans need to be evaluated for impairment under FAS 114. Scrutiny also focuses on how the institution determines whether the loan should be considered “collateral-dependent” and evaluated under the “Fair Market

Value of Collateral” method or under the “Present Value of Future Cash Flows” method if the borrower is still expected to make repayments on the loan, as well as which assumptions should be employed in either method.

Given the above list of [ALLL challenges](#) and the increased regulatory demands in other areas of their operations, it is easy to see how many financial institutions struggle to put together a comprehensive, systematic and consistent estimation of their allowance for loan and lease losses while meeting the demands of various constituencies that scrutinize the calculation.

For some institutions, one of the greatest challenges is tied to the assumptions used to determine the FAS 5 reserves. Calculating Specific Reserves under FAS 114 also presents challenges that will be described in a [later chapter](#).

3. THREE STEPS TO ESTIMATING RESERVES UNDER FAS 5

Accounting Standards Codification Subtopic 450-20 (which is more commonly known by its predecessor, FAS 5) is a principal source of guidance on accounting for all types of losses – insurance, litigation, loans, etc.

In contrast to FAS 114, which relates to loans individually determined to be impaired, FAS 5’s contribution to the ALLL includes the component for loans that have not been individually identified as being impaired (i.e., loans performing in accordance with contractual terms). In accordance with FAS 5, measuring estimated credit losses involves grouping these loans into homogeneous pools, or groups of loans with similar risk characteristics, and evaluating the pools collectively considering both quantitative (historical losses) and qualitative (environmental adjustment) measures in order to determine appropriate levels of FAS 5 “General Reserves.”

According to Gary Deutsch, a leading expert on the ALLL and President of BRT Publications, a risk management training and consulting firm: “The most challenging part of the ALLL estimation process is determining the amount of reserves needed for loans analyzed in risk pools...because there is no one, best method to determine the losses inherent in the

pools.” While there may be no single, best method to determining losses inherent in the pools, here are three steps institutions can take to calculate an adequate pooled loans portion of the ALLL and to minimize regulatory criticism.

1) Assemble Risk Pools: Avoid Pools That Are Too Broadly Segmented

The first aspect of estimating the General Reserves under FAS 5 is assembling risk pools that accurately reflect the segmentation of risk within the institution’s portfolio. Many institutions have historically used overly broad pools for the FAS 5 evaluation; they have typically included three or four basic segments such as Real Estate, Commercial and Consumer. This breakdown is now viewed by many auditors and examiners as inadequate because these broad buckets are unable to account for the varying levels of risk within each of the loan segments. For example, the “Real Estate” segment could contain loans of such different risk profiles as Commercial Real Estate, Residential Real Estate and Construction and Development, among others. Segmenting by FDIC Call Code is an improvement over the basic breakdown into three to four portfolio segments. However, it is still not granular enough.

The FASB's Accounting Standards Update No. 2010-20 requires that institutions begin using at least two levels of disaggregation for their risk pools, and it even recommends a third level. The three levels of disaggregation are usually portfolio segment, class and measurement attribute. For example, Commercial Real Estate is a portfolio segment; it can be disaggregated further by class or collateral type into groupings such as "Commercial Real Estate – Office Building" and "Commercial Real Estate – Retail." Those segments can be broken down to a third level by measurement attribute, such as risk rating, delinquency or risk level (Pass, Special Mention, Substandard and Doubtful), resulting in much more specific pools, such as "Commercial Real Estate – Office – Substandard." This allows the financial institution to assess the risk inherent in each pool more accurately using qualitative adjustments differently within each of the more specific pools.

<u>Loan Type Code</u>	<u>Total Loan Balance</u>	<u>Historical Loss Rate</u>	<u>Historical Loss Reserve</u>
COMMERCIAL (847)	\$305,685,228.32	2.3447%	\$7,080,778.24
Pass (564)	\$182,978,345.26	0.3270%	\$586,894.19
Watch List (129)	\$73,229,661.69	1.1680%	\$855,322.45
Special Mention (31)	\$8,266,116.47	1.4557%	\$120,329.86
Substandard (123)	\$41,212,204.90	13.4548%	\$5,518,231.74

Sample pools within an institution's C&I portfolio, segmented also by risk rating.

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

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

Many financial institutions employ the historical loss rate approach, in part, because data collection is easier. This approach primarily requires tracking charge-offs and recoveries within each segment over a defined period of time. Two primary challenges related to this are (1) determining the appropriate number of periods of data to incorporate and (2) whether to apply an arithmetic average or weighted average of loss rates.

Traditionally, institutions have used a longer time horizon, incorporating three to five years of loss data. A drawback of this is that it may not reflect increased losses incurred in more recent years. More institutions are now using a shorter time

horizon, such as a rolling four to eight quarters. Another option is to use a weighted average that applies greater weight to more recent loss rates. In any case, the institution must ensure it uses historical loss factors that are indicative of the losses inherent in each segment of the portfolio at the current time.

Historical Loss Rate Analysis									
C&I Pass, SM, Substandard	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	TOTALS
Net Charge Offs	.5	5	6	2	2	3	6.5	3	28
Starting Loan Balance	225	225	225	225	225	225	225	225	225
Additional Loan Balance	0	7	11	15	20	21	27	32	
Additional Net Charge Offs	0	0	1.5	4.5	2	4	0	4	16
Ending Loan Balance	224.5	227	228.5	233.5	241	239	245.5	250	236.125
Total Net Charge Offs	44								
Average Loan Balance	236.125								
Annual Historical Loss Rate	0.1863419 / 2 = 0.093171								

The drawback of the historical loss rate approach is that it can be less effective in times of economic turbulence. Deutsch notes that another option, migration analysis, is used less often but is actually more effective at estimating inherent losses during times of economic volatility.

Under migration analysis, institutions track the migration of loans through various stages toward charge-off status, which can give a more accurate picture of how the current portfolio would migrate to loss. The basic methodology for migration analysis is to set up appropriate buckets to track within each

segment. As an example, within consumer loans, this could be based on delinquency (Current, 30-59 days, 60-89 and 90+ Days Past Due), and within commercial loan segments, this could include general risk level (Pass, Special Mention, Substandard and Doubtful). The institution must then determine the defined loss horizon.

Migration Analysis

C&I - Pass	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	TOTALS	Migration = 0.08
Net Charge Offs		2	3	1	2		3	1	12	
Starting Loan Balance	150	150	150	150	150	150	150	150	150	
Additional Loan Balance		5	8	8	11	11	13	16		
Additional Net Charge Offs			1	2	2	1		2	16	
Ending Loan Balance	150	153	154	155	157	160	160	163	156.5	
C&I - Special Mention	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	TOTALS	Migration = 0.14
Net Charge Offs	0.5	1	1			2	1.5	1	7	
Starting Loan Balance	50	50	50	50	50	50	50	50	50	
Additional Loan Balance		1	2	5	5	6	8	9		
Additional Net Charge Offs			0.5	1.5		1		1	4	
Ending Loan Balance	49.5	50	50.5	53.5	55	53	56.5	57	53.125	
C&I - Substandard	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	TOTALS	Migration = 0.36
Net Charge Offs		2	2	1		1	2	1	9	
Starting Loan Balance	25	25	25	25	25	25	25	25	25	
Additional Loan Balance		1	1	2	4	4	6	7		
Additional Net Charge Offs				1		2		1	4	
Ending Loan Balance	25	24	24	25	29	26	29	30	26.5	

Data collection is the biggest challenge in migration analysis. It takes a minimum of four quarters with a structured data collection process to gather enough data to use this approach for estimating loss factors. Additional information on

difficulties and benefits of migration analysis is presented later, in [chapter 5](#).

The migration analysis approach can be more robust; however, for many institutions, the standard historical loss rate approach may still be adequate and most appropriate.

Regulators recognize that 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. Qualitative and environmental factors provide management with an opportunity to make adjustments to reserve amounts for FAS 5 loan pools and then transparently explain the assumptions behind those adjustments.

3) Evaluate Qualitative and Environmental Factors

Perhaps the biggest challenge that institutions face in the estimation of the FAS 5 reserves is the determination of adjustments to take into account for qualitative and environmental factors that may impact loan losses.

The [2006 Interagency Policy Statement](#) on the ALLL provides

little direction on how these determinations should be made, advising only that “management should consider those current qualitative or environmental factors that are likely to cause estimated credit losses as of the evaluation date to differ from the group’s historical loss experience.” It further vaguely explains that these determinations are to be “based on a comprehensive, well-documented and consistently applied analysis of its [loan portfolio](#).”

Below is an example matrix where an institution identified a few of their qualitative factors and began to assign quantitative adjustments. In addition to the matrix, the ALLL documentation would have to include notes as to why these assumptions were made and how the figures were determined.

<u>Risk Factor</u>	<u>Change From Prior Period</u>	<u>Current Adjustment</u>
Changes in the experience, depth and ability of lending management	Improvement	-0.1200
Changes in the volume and severity of past due loans and other similar conditions	Significant Improvement	-0.1600
Changes in the quality of the organization’s loan review system	Same	0.0000
Changes in the value of the underlying collateral for collateral dependent loans	Same	0.0000
The existence and effect of any concentrations of credit and changes in the levels of such concentrations	Slight Decline	0.0400

While the lack of specific direction provides management teams with tremendous freedom, it also exposes the process to significant regulatory scrutiny. Regulators want structure and consistency, but a modern-day author wrote, “Subjectivity measures nothing consistently.”¹

Financial institutions, however, can add objectivity and structure to this otherwise subjective task and appropriately justify their assumptions using the recommendations discussed in the [next chapter](#).

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

Did you know? [Sageworks ALLL](#) allows you to import recent macroeconomic data from the Federal Reserve and proprietary industry data to provide justification for qualitative adjustments. It also produces a Q factor history report to track qualitative factor adjustments made over time.

4. ADDING OBJECTIVITY TO QUALITATIVE FACTORS

As previously mentioned, adjusting expected loan losses under FAS 5 for qualitative and environmental factors (sometimes referred to as Q factors) is a subjective task at its core. This subjectivity has allowed examiners to target this area of financial institutions' ALLL calculations as weak points. But there are six ways institutions and their management teams can reduce this subjectivity. Management teams are encouraged to utilize the resources available to them and to make those qualitative adjustments that can be adequately substantiated with relevant, supporting documentation.

Add Objectivity to Qualitative Factors

1. Follow Interagency Guidance
2. Create a Standard Process of Review
3. Utilize Current Market Information
4. Provide Directional Consistency
5. Conduct Correlation Analysis
6. Use Back-Testing as a Method of Validation

The first is determining which qualitative factors to assess, and a good starting point is to follow the Interagency guidelines on the ALLL.

1. Follow Interagency Guidance

The 2006 Interagency Policy Statement explained that nine qualitative factors should be considered when an institution estimates credit losses:²

Changes in lending policies and procedures, including changes in underwriting standards and collections, charge offs and recovery practices.

Changes in international, national, regional and local conditions.

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

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

Changes in the volume and severity of past due loans and other similar conditions.

Changes in the quality of the organization'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 levels of such concentrations.

The effect of other external factors (i.e. competition, legal and [regulatory requirements](#)) on the level of estimated credit losses.

These can be modified where appropriate, depending on the levels of risk within an institution's portfolio and segments.

2. Create a Standard Process of Review

Creating an institution-wide standard process of review regarding proper procedure and application of qualitative risk factors will ensure consistency and limit the amount of subjectivity. As part of the standard process of review, management can create a table of metrics that are drivers to the nine Interagency recommended factors. These factor-driver measurements can be used to support an institution's reason for a qualitative historical rate adjustment.

Bank Examiner Sharon Wells released a 2010 fourth quarter publication titled, "Qualitative Factors and the Allowance for Loan and Lease Losses in Community Banks," which outlines three to 13 drivers for each Interagency recommended factor, noting these drivers "could be considered when evaluating inherent risk that may drive losses in a loan portfolio."³

Moreover, default rate adjustments should be developed and implemented to prevent subjective rate changes from prior periods. The default rates should be developed in a matrix grounded on the institution's previous loss experience.

Another recommendation is to attach comments to each adjustment. These comments will document the reasoning for the rate change from the prior period and will decrease

the likelihood of examiners finding the rate adjustments to be without sound reason or too subjective.

3. Utilize Current Market Information

Considering current market information, economic trends and events within institutions' lending footprints can help add objectivity and structure. Examiners expect adjustments to mirror the improvement and decline of both internal and external economic factors.

External environmental factors include changes in unemployment rates, bankruptcy rates or foreclosure numbers. Internal factors include changes in portfolio concentrations, institution policies/procedures or management experience. All these internal and external environmental factors should be identified, analyzed and potentially reflected in the quantitative adjustments.

Vincent Van Nevel, Managing Director of Professional Bank Services, a bank consulting firm located in Louisville, Ky., notes: "These adjustments can be highly subjective; however, if the institution has any prior experience with similar cycles or events in the past, it can research the impact such events had on its portfolio. This assumes similar underwriting practices

were in effect in past periods. Other sources for determining the magnitude of such adjustments include peer experience, and, in particular, loss experience by loan type for institutions experiencing higher loss experience.”

Where appropriate, reference trends in national, regional and local economic data.

4. Provide Directional Consistency

Ensuring that determinations are always directionally consistent with credit quality trends is critical. The 2006 Interagency Policy Statement advises:

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.

Simply put, directional consistency validates that as drivers and factors change rate directions, an institution's qualitative rates change direction as well and in accordance with the

proper correlation to the driver and factor. Documentation of sequential changes to factor rates, supported with driver graphs and/or measurements, ensures directional consistency has been maintained. Internal management reports can be developed to track and support loan payment delinquencies, collateral values and loan concentrations, which would be very useful in supporting changes in any of the nine factors. Also, the [Federal Reserve Economic Data](#) (FRED) is a common resource of graphs and data.

5. Conduct Correlation Analysis

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

Correlation analysis enables management teams to measure the strength of the relationship between two variables: how well changes in one variable can be predicted by changes in another.

6. Use Back-Testing as a Method of Validation

Additionally, the institution can employ back-testing to match up historical losses with the levels of its ALLL over past periods to show the historical accuracy of the assumptions used in its methodology.

The estimation of the qualitative factors may still largely be judgmental and subjective, but a correlation analysis, peer comparisons and historical back-testing can provide quantitative support to these judgments.

5. PROS & CONS OF MIGRATION ANALYSIS

While regulatory guidance is scarce, latitude is given to each institution to select the methodology best suited for its own unique characteristics and complexities when determining historical loss experience for FAS 5 pools. According to the Office of the Comptroller of the Currency (OCC):

*The OCC does not require that banks use a specific method to determine historical loss experience. The method a bank uses will depend to a large degree upon the capabilities of its information systems. Acceptable methods range from a simple average of the bank's historical loss experience over a period of years, to more complex migration analysis techniques.*⁴

Migration analysis is a rigorous analytical process recommended by the regulatory agencies to determine financial institutions' ALLL, yet it is underutilized. This uses loan-level attributes to track the movement, or migration, of loans through the various loan classifications in order to estimate the percentage of losses likely to be incurred in a financial institution's current portfolio.⁵ The purpose of migration analysis is to determine what rate of loss an institution has incurred on similarly criticized or past due loans.⁶ For proper application, however, migration analysis requires extensive data collection and a consistent, prudent [risk rating methodology](#).

Migration Analysis										
C&I - Pass	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	TOTALS	Migration = 0.08
Net Charge Offs		2	3	1	2		3	1	12	
Starting Loan Balance	150	150	150	150	150	150	150	150	150	
Additional Loan Balance		5	8	8	11	11	13	16		
Additional Net Charge Offs			1	2	2	1		2	16	
Ending Loan Balance	150	153	154	155	157	160	160	163	156.5	
C&I - Special Mention	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	TOTALS	Migration = 0.14
Net Charge Offs	0.5	1	1			2	1.5	1	7	
Starting Loan Balance	50	50	50	50	50	50	50	50	50	
Additional Loan Balance		1	2	5	5	6	8	9		
Additional Net Charge Offs			0.5	1.5		1		1	4	
Ending Loan Balance	49.5	50	50.5	53.5	55	53	56.5	57	53.125	
C&I - Substandard	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	TOTALS	Migration = 0.36
Net Charge Offs		2	2	1		1	2	1	9	
Starting Loan Balance	25	25	25	25	25	25	25	25	25	
Additional Loan Balance		1	1	2	4	4	6	7		
Additional Net Charge Offs				1		2		1	4	
Ending Loan Balance	25	24	24	25	29	26	29	30	26.5	

Problems of Migration Analysis

Over time, information systems have changed exponentially due to advancements in technology, including cloud computing, dynamic coding and web-based platforms. Despite these technological advancements, the movement toward more sophisticated calculations of ALLL provisions has actually diminished. A major cause for this is the heavy

reliance among financial institutions on spreadsheets, a relatively weak and [error-prone platform for risk management](#) that is less conducive to the complex nature of migration analysis. Whether due to lack of knowledge or fear of change, many financial institutions have not taken advantage of evolving information systems' capabilities that make it possible for mid-sized and large institutions to use migration analysis to determine their ALLL provisions.

The elements involved in a true migration analysis typically require a considerable amount of personnel, IT and data resources, so if those resources are unavailable, an institution may not be able to execute this more complex approach.

For proper analysis using the migration technique, loan portfolios should be first [broken down into homogeneous pools](#) by similar attributes (Federal Call Codes, geographic similarities, loan types, etc.) and then further broken down by risk classification (Pass, Special Mention, Substandard, Doubtful) or delinquency ranges (0-29, 30-59, 60-89, 90+).

When broken down to this extent, an institution with a smaller loan portfolio may have inadequate sample sizes to average out any anomalies that may be in each loan bucket.

That can distort calculated rates, thus failing to provide a proper ALLL provision. As a result, it may often be more appropriate for these smaller institutions to use the more common historical loss rate method.

Access to historical data is often a barrier to the migration analysis method. The results of a migration analysis rely heavily on high-quality historical data, an accurate historical loan risk rating system and other sound internal practices. The Office of Thrift Supervision's Examination Handbook explained, "An ineffective problem-loan identification, classification, or charge-off system will materially distort historical net loss percentages and make migration analysis difficult to apply." The absence of quality data as the cornerstone of a migration analysis can result in inaccurate results.

Benefits of Migration Analysis

The extensive segmentation of the loan portfolio in migration analysis results in a more granular study and provides a more accurate picture of how an existing portfolio would migrate to loss.

Though some financial institutions are fearful that migration analysis will increase an institution's current ALLL provision, a [proper analysis](#) helps ensure adequate reserves. The OCC stated in March 1997, "An understated ALLL expense will overstate the bank's earnings and can result in the violation of law."⁷ This statement makes it clear that a proper ALLL provision isn't a recommendation, but a requirement. If falsely calculated, for whatever reason, the ALLL provision can have profound implications upon the financial institution's good standing and reputation in the eyes of public opinion and the law.

On the other hand, migration analysis is the most quantitatively rigorous and accurate method to justify a decrease in provisions when circumstances warrant. The migration method accounts for changes in composition of the credit portfolio and credit quality deterioration. Its sophistication and accuracy is recognized by examiners, which reduces the risk of regulatory criticism following a decrease in provisions.

For a detailed comparison of migration analysis and the historical loss rate method, see the Sageworks whitepaper, ["Pros and Cons of Migration Analysis."](#)

6. SUPPORTING CHANGES IN THE ALLL RESERVE

In the aftermath of the 2008 financial crisis, regulators have come to consider the ALLL a signal to indicate a financial institution's ability to withstand and absorb losses. With over 450 bank failures since 2009, regulators interpret an inadequate ALLL as a key barometer of financial health.

Nevertheless, it is important to follow accounting guidance to ensure an accurate ALLL estimation, rather than increase it arbitrarily due to perceived regulatory pressure.

An overstated ALLL expense can understate and limit the institution's earnings.⁸ Overstating an ALLL expense is neither prudent to shareholders and boards of directors nor recommended by regulatory guidance.

Therefore, institutions may be asking, "If I feel I have an overstated ALLL, how can I decrease my provision?"

Justification of a decrease can come from following the same guidance used to estimate a proper ALLL provision in general: the [2006 Interagency Policy Statement](#), which advises that loan portfolio analysis should be comprehensive, well documented, consistently applied and inclusive of environmental and qualitative factors.⁹

The following is a list of key considerations when considering a change in the reserve.

1. Comprehensive

As discussed earlier, spreadsheets widely used for determining the ALLL provision are relatively weak and error-prone tools when it comes to complex analyses. They are not well equipped to handle the complex reserve calculations now necessary.

Using a more comprehensive approach to calculating the ALLL provision is one step to justify an ALLL decrease. This can be accomplished by one or more of the following:

1. Moving from historical loss rates to [migration analysis](#).
2. Using [automated software](#) that provides more detailed analysis, which spreadsheets are unable to provide without incurring excessive costs or room for additional error.
3. *De novo* institutions changing from peer group loss rates to true historical loss rates after their *de novo* status ends.

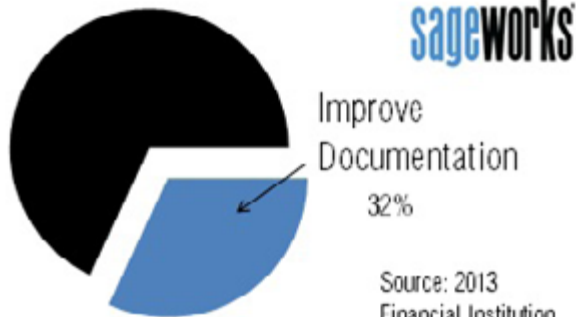
2. Proper Documentation

The Interagency Policy Statement also points out that a “well documented” analysis is required, yet this is often a weakness. In a recent Sageworks survey, many respondents who were asked to share post-exam ALLL advice recommended paying close attention to documentation. Said one, “Document everything! Every assumption you make, every calculation process, every reason for why you do it the way you do.”

In the survey, bankers were asked what advice they would give to other bankers to prepare for an examination. Regarding the ALLL, almost **one third of the respondents specifically advised to beef up documentation in the allowance.**

Web-based software can reduce the time required for the analysis and can improve documentation by maintaining

What ALLL advice would you share with other bankers before an exam?



Source: 2013
Financial Institution
Examination Survey

existing impaired loan calculations, pulling in graphs from the Federal Reserve Economic Data, showcasing past environmental factor changes in accordance with changes in related data and, in turn, proving directional [consistency in the institution's ALLL calculation](#). The better documented an institution's ALLL calculation, the more evident it is that the calculation is sound, justified and in compliance with accounting guidance.

3. Consistency

Examiners and regulatory guidance call for a consistently applied analysis in determining a financial institution's ALLL reserve amount. This may seem like a difficult obstacle if it requires a methodology change, such as peer groups to historical loss rates, historical loss rate to migration analysis, or the move from using a spreadsheet-based calculation to implementing a web-based software solution. Yet, regulatory guidance supports changes that result in a more granular and detailed analysis. For example, a change to migration analysis for larger institutions is not only accepted by examiners, but it is also recognized for its sophistication and accuracy. In fact, regulatory criticism is often reduced after such a change, even with an outcome resulting in decreased ALLL provisions.

Similar experiences dictate that moving from a complex, manual set of multi-tab spreadsheets to a software application can lead to less regulatory criticism. Software solutions also provide a level of subject matter expertise and eliminate a degree of human error through automation. The structure of software encourages and makes it easier for better documentation, along with more comprehensive and granular analysis, while reducing subjectivity from environmental and qualitative factors.

4. Qualitative and Environmental Factors

Qualitative and environmental factors are vital to regulators' guidance on a financial institution's ALLL provision. These factors are subjective in nature and are often the area in an ALLL calculation most susceptible to examiner criticism. Therefore, taking steps to add objectivity to these environmental and qualitative factors is one way to support changes in the ALLL. See [Chapter 4](#) for more detail on this issue.

In summary, institutions can further improve upon their ALLL and conduct a more granular, robust ALLL provision analysis by moving to migration analysis, by switching to ALLL-focused software, removing subjectivity in

environmental factors, or combining all these improvements. This process very well may show a decrease in the required reserve. Will this raise an examiner's eyebrow? Likely. Teresa Curran, the director of banking supervision and regulation for the Federal Reserve Bank of San Francisco, noted in June 2011's "Supervisory Spotlight" that examiners watch certain areas more closely when an ALLL decrease occurs. These areas for greater scrutiny include:

- Showing adequate support for a reduction of the allowance due to improved qualitative factors.
- Studying impaired loan analysis for excessive optimism for cash flow expectations.¹⁰

However, the decrease in your reserve can be justified and supported by regulatory and accounting guidance by:

- Performing a more detailed, robust analysis.
- Providing increased and richer documentation to strengthen the reasoning behind your ALLL calculation and the assumptions for your cash flow estimates.
- Maintaining a consistently applied ALLL procedure.
- Limiting subjectivity in environmental and [qualitative risk factor calculations](#).

7. CHALLENGES & IMPROVEMENTS IN THE FAS 114 RESERVE

Defending the FAS 5 General Reserve calculations tends to be the challenge most cited by financial institutions when presenting the ALLL, but there are also inherent challenges in the calculation of Specific Reserves under FAS 114. These challenges include:

1. Determining which loans should be evaluated individually under FAS 114 vs. in pools under FAS 5.

Many financial institutions start by using the criteria of separating out into FAS 114 any loans that are risk rated Substandard or worse on the institution's risk rating system. One of the challenges inherent in this approach is that it is dependent on the institution having an effective risk rating methodology that is current and reflective of the level of risk on its loans. Bruce Vance from Advanced Bank Solutions says: "The primary challenge is the proper risk rating of loans, especially the identification of impaired loans... banking regulators are keenly focused on this area." To ensure the institution is not missing any loans that need to be evaluated individually, it should consider also looking at:

- a. All loans labeled as a Troubled Debt Restructure (TDR). Most, if not all, of these loans should be evaluated under FAS 114.

b. All loans considered to be in nonaccrual. The bank still may have some threshold (by dollar volume), but they will want to ensure that the appropriate loans in this category are being evaluated under FAS 114 in case some of these are not picked up by the risk rating criteria.

c. Loans at a certain level of delinquency (i.e., Days Currently Past Due > 90, or loans that have reached certain delinquency levels a set number of times).

On the opposite end of the spectrum, another potential pitfall is being too conservative. Vincent Van Nevel of Professional Bank Services, Inc. points out that one of the biggest traps is calculating impairment on loans that are really not impaired. “For example, many banks are just being conservative and calculating potential ‘exposure’ on all substandard rated credits. Many of these credits may still be paying or modestly past due, but are not yet past due enough (90 days) to be considered impaired, nor are they truly collateral-dependent. **Once the regulators see the bank has an impairment calculated, they will require it to be non-accrual and possibly a partial charge-off.**” Financial institutions must ensure they use the risk rating system effectively and look beyond it to other metrics during this process.

2. Ensuring that loans are not double-counted for reserves under both FAS 5 and FAS 114.

This is relatively straightforward, but it is sometimes overlooked. Loans that are being reserved for individually should not be counted in the Pooled Reserve Analysis under FAS 5 (ASC 450-20).

3. Determining whether a loan that is being evaluated for impairment under FAS 114 should be evaluated using the Fair Market Value of Collateral method or the Present Value of Future Cash Flows method.

From a strict accounting standpoint, loans that are considered “collateral-dependent” should be evaluated using the Fair Market Value of Collateral method. The contentious aspect lies in determining whether a loan should be considered “collateral-dependent.” From a strict accounting perspective, any loan still expected to be supported by repayment from the borrower should be evaluated under the Present Value of Future Cash Flows method. At a minimum, most if not all Troubled Debt Restructures should be evaluated in this way.

For other loans, the line may be more blurry. If the borrower

is still expected to make payments, the strict accounting perspective may say that the financial institution should evaluate the loan under the Present Value of Future Cash Flows method. Regulators, however, may be more apt to want to see the impairment under the Fair Market Value of Collateral method for any loan that would rely on the value of collateral for recovery in the event of default. In these instances where the decision isn't black and white, the institution should clearly document why they have chosen the valuation method that they have. It may also make sense to evaluate what the impairment would be under either method, so that once a loan becomes considered collateral-dependent (i.e., the institution deems that the borrower will not be repaying the principal), the institution can quickly change their impairment analysis.

4. Using the appropriate and updated values for impairment analysis under either method.

For each valuation method, key aspects that need to be examined and accounted for appropriately are:

Fair Market Value of Collateral

Use collateral values from an appraisal that is as current as possible. An outdated appraisal means the appraisal value should be updated accordingly.

Take into account any complexities around cross-collateralization or prior liens from other institutions so that the institution is only including the equity value that could be used towards the loan in question.

Document appropriate assumptions for any selling costs that will be incurred in the event of liquidation.

Present Value of Future Cash Flows

Use the original contractual interest rate as the discount rate for the cash flows.

Ideally, set up a month-by-month analysis with the Expected Payment discounted appropriately for each month.

Be wary of the “NPV” function in spreadsheets, as this does not give an accurate Present Value unless appropriate adjustments are made to account for the appropriate timing of cash flows, particularly as it pertains to accounting for the “Total Recorded Investment” as a net outflow in the formula.

For both approaches, the institution needs to make sure it takes into account all items that should be included in

the Total Recorded Investment for the loan, including Outstanding Principal Balance, Accrued Interest and Net Deferred Fees or Costs.

The third valuation method approved in accounting guidance, the Loan Pricing method, is rarely used and is not discussed in detail here. In this method, an institution derives the value from a loan's observable market price by soliciting other institutions to see what they would pay for the loan. The primary challenge with the Loan Pricing method is defending and documenting the amount, source and date of the observable market price.

Visit Sageworks' [resources for bankers](#) to access a net present value of future cash flows calculator and download a worksheet to document and analyze collateral-dependent loans.

5. If a loan is evaluated for impairment and is found *not* to be impaired, then it should be moved back to its appropriate FAS 5 pool and reserved for with other loans of similar risk.

This refers to a loan on the border of being impaired. Upon analysis, however, it is found that expected payments should

cover the entire remaining outstanding balance. In this instance, the loan is not impaired, and it should be reserved for along with its appropriate FAS 5 pool.

Actual FAS 114 calculations can be relatively simple, but failing to follow the FASB methodology or appropriately document assumptions can leave an institution vulnerable to criticism by regulators or auditors. It is imperative to set clear loan policies for making assumptions on these items and for implementing and documenting them in their ALLL estimation.

8. DEMYSTIFYING DISCLOSURE REPORTS

In July 2010, the Financial Accounting Standards Board (FASB) released a significant update, Accounting Standards Update 2010-20, requiring swift change surrounding disclosure requirements involving the credit quality of financing receivables and the allowance for credit losses. With the relatively quick implementation goals, ambiguous descriptions and a lack of FASB-published documentation to accurately discern the new requirements, bankers' interpretations of the FASB's Topic 310 update have been inconsistent and ill effective.

The following answers to six common questions should demystify the update and help institutions properly follow FASB guidance for the newly required disclosure reports.

1. Why the update?
2. What exactly is meant by “financing receivables?”
3. When did these reports become required?
4. What if my institution is not yet aware of these disclosures and has failed to meet the original implementation timeline?
5. What key items must be produced?
6. What challenges will the new requirements most likely present?

1. Why the update?

The FASB said the main objective is “to provide financial statement users with greater transparency about an entity’s allowance for credit losses and the credit quality of its financing receivables.”

The goal is for financial statement users to better recognize previous credit weakness in an institution’s loan portfolio. Armed with more complete information, users can make more informed, strategic decisions about concentrations or thresholds, with the goal of preventing future weakness.

Provisions within ASU 2010-20 also allowed the FASB to push for greater alignment between requirements in U.S. Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS). **While U.S. GAAP only requires credit quality and allowance for credit losses to be presented on an aggregate basis, the new update calls for information to be presented in disaggregated form, which is similar to the disaggregation principles of IFRS.**

2. What exactly is meant by “financing receivables?”

Financing receivables in the FASB update is defined as an institution’s loan portfolio (where a loan is a contractual right to receive money whether on demand, on a fixed date or a determinable date) void of term loans with maturity dates of less than one year from date of origination and void of credit card receivables. “Financing receivables” would include loans, credit cards, trade accounts receivables, notes receivables and lease receivables.

3. When did these reports become required?

Public entities, banks that have a majority of shares owned by the government, were required to begin following the new disclosure reporting standards by December 15, 2010. Non-public entities had until December 15, 2011, to execute the disclosures. Thus far, these reports are required to be completed on an annual basis.

4. What if my institution is not yet aware of these disclosures and has failed to meet the original implementation timeline?

While the FASB sets accounting standards, it does not have authority to enforce them. The SEC enforces FASB standards for public entities. The new disclosure reporting has been enforced in entirety among public banks, but no known penalties have been reported.

For private institutions, the FASB standards are enforced by the American Institute of CPAs (AICPA), which is commonly represented by an institution's external auditors, so institutions should check with their auditors regarding the timeline and implementation. In the rare case your auditor did not respond accordingly or interpreted the FASB update differently than you, understand that there has been little known enforcement and no reported penalties to this point.

5. What key items must be produced?

New Additional Disclosures:

1. Credit quality indicators by loan class, whether that is one or a combination of risk grade, risk profile or performing vs. nonperforming.

Loan Type Code	Pass	Special Mention	Substandard	Doubtful	Total
COMMERCIAL	\$183,082,565.27	\$25,686,256.79	\$48,230,354.03	\$8,228,496.66	\$341,833,552.99
CONSUMER	\$324,717,622.38	\$1,723,763.29	\$10,089,685.16	\$0.00	\$348,974,552.09
CRE	\$480,441,665.40	\$19,377,764.47	\$47,610,096.45	\$20,967.76	\$600,804,315.89
Total:	\$988,221,853.05	\$46,790,784.55	\$105,930,135.64	\$8,247,464.42	\$1,291,612,420.97

Chapter 8

2. Aging of past due loans by loan class.

Disclosure- Aging Analysis of Loans by Class									
Call Code	30-59 Days Past Due	60-89 Days Past Due	90+ Days Past Due	Total Past Due	Current	Total Loans	Total Loans >90 Days and Still Accruing	Total Nonaccrual Loans	
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1a1	\$0.00	\$0.00	\$0.00	\$0.00	\$639,741.65	\$639,741.65	\$0.00	\$0.00	\$0.00
1a2	\$386,157.36	\$175,092.89	\$1,300,000.00	\$1,861,250.25	\$11,657,201.26	\$13,518,451.51	\$1,306,000.00	\$2,064,301.94	\$0.00
1b	\$0.00	\$0.00	\$0.00	\$0.00	\$160,600.00	\$160,600.00	\$0.00	\$0.00	\$0.00
1c1	\$411,602.55	\$70,679.15	\$162,873.54	\$645,155.24	\$24,104,551.02	\$24,769,706.26	\$182,873.54	\$566,676.29	\$0.00
1c2a	\$707,687.52	\$155,533.29	\$232,354.73	\$1,094,975.54	\$24,861,144.61	\$25,976,120.15	\$232,354.73	\$566,676.29	\$0.00
1c2b	\$30,605.24	\$01,545.56	\$0.00	\$38,150.80	\$2,208,801.61	\$2,208,952.53	\$0.00	\$0.00	\$0.00
1d	\$0.00	\$0.00	\$0.00	\$0.00	\$2,329,674.66	\$2,329,674.66	\$0.00	\$0.00	\$0.00
1e1	\$171,852.01	\$624,063.27	\$1,510,503.06	\$2,478,979.51	\$33,968,344.00	\$36,447,323.51	\$1,495,300.05	\$379,206.52	\$0.00
1e2	\$682,091.24	\$0.00	\$700,255.36	\$1,291,346.63	\$13,572,202.51	\$14,863,650.14	\$700,255.36	\$260,942.37	\$0.00
1a	\$444,636.04	\$0.00	\$249,614.32	\$694,250.36	\$33,737,604.42	\$34,431,856.78	\$36,166.41	\$511,480.35	\$0.00
1b	\$0.00	\$0.00	\$0.00	\$0.00	\$23,627.77	\$23,627.77	\$0.00	\$0.00	\$0.00
1c	\$0.00	\$0.00	\$19,239.31	\$19,239.31	\$1,968,659.30	\$2,016,266.61	\$0.00	\$0.00	\$0.00
1d	\$20,120.45	\$0.00	\$5,738.64	\$26,059.09	\$643,171.14	\$669,430.73	\$0.00	\$5,738.64	\$0.00
1e	\$0.00	\$0.00	\$485,000.00	\$489,263.88	\$3,391,253.63	\$3,890,517.51	\$0.00	\$540,612.08	\$0.00
Total	\$2,760,354.41	\$1,086,914.28	\$4,693,578.99	\$8,777,872.73	\$153,315,367.80	\$162,643,040.53	\$3,356,020.12	\$4,330,360.59	

3. In-depth Troubled Debt Restructuring (TDR) report by loan class for occurrences during the reporting period.

TDR Pre & Post Modification Report			
12/31/2012			
Loan Type Code	Number of Contracts	Pre Modification Recorded Investment	Post Modification Recorded Investment
Commercial Ln Non-RE	5	\$137,713.63	\$124,551.17
Commercial RE	5	\$3,015,830.96	\$2,061,758.08
Consumer Ln Non-RE	5	\$110,599.97	\$69,985.59
Multi Family and Rental RE	3	\$227,981.78	\$181,826.42
Residential RE	3	\$618,607.99	\$618,869.67
Retail TDR and Impaired	0	\$0.00	\$0.00
Totals:	21	\$4,110,734.33	\$3,956,990.93

4. Report of TDR defaults in the past twelve months by loan class and their impact upon the ALLL.

TDR Re-default Report		
12/31/2012		
Loan Type Code	Number of Contracts	Recorded Investment
Commercial Ln Non-RE	3	\$307,806.48
Commercial RE	2	\$99,045.23
Consumer Ln Non-RE	3	\$55,692.18
Multi Family and Rental RE	0	\$0.00
Residential RE	1	\$14,156.00
Totals:	9	\$477,499.89

5. Listing of significant loan purchases and sales of loans separated by portfolio segment.

Updates to Existing Disclosures:

1. Roll-forward schedule for the allowance for credit losses now disaggregated on the basis of the loan class.
2. For each disaggregated balance in #1, each corresponding loan's total recorded investment listed out.
3. The nonaccrual status of loans by loan class.
4. Impaired loans by loan class with and without reserve required; also required to disclose Interest Income recognized and Average Recorded Investment by loan class.

Impaired Loans

as of December 31, 2012

Loan Type Code	Recorded Investment	Unpaid Principal Balance	Related Allowance	Avg Recorded Investment	Interest Income Recognized
Ag Production Loans					
With no related allowance recorded:	\$0.00	\$0.00	\$0.00	\$10,511.54	\$0.00
With an allowance recorded:	\$75,496.31	\$75,496.31	\$4,740.47	\$90,784.18	\$5,198.09
Total:	\$75,496.31	\$75,496.31	\$4,740.47	\$101,295.71	\$5,198.09
AG Real Estate					
With no related allowance recorded:	\$0.00	\$0.00	\$0.00	\$417,755.26	\$0.00
With an allowance recorded:	\$1,643,830.55	\$1,643,830.55	\$103,571.71	\$1,729,642.79	\$35,741.01
Total:	\$1,643,830.55	\$1,643,830.55	\$103,571.71	\$2,147,398.05	\$35,741.01
Commercial Ln Non-RE					
With no related allowance recorded:	\$164,127.59	\$169,796.36	\$0.00	\$168,621.64	\$13,734.74
With an allowance recorded:	\$211,913.49	\$211,913.49	\$15,237.37	\$306,725.02	\$14,357.69
Total:	\$376,041.08	\$381,709.85	\$15,237.37	\$475,346.66	\$28,092.43
Commercial RE					
With no related allowance recorded:	\$1,265,512.20	\$1,265,512.20	\$0.00	\$1,311,784.13	\$61,933.54
With an allowance recorded:	\$13,073,104.28	\$13,701,967.28	\$1,306,716.64	\$13,000,710.04	\$590,982.70
Total:	\$14,338,616.48	\$14,967,479.48	\$1,306,716.64	\$14,312,494.16	\$652,916.24

6. What challenges will the new requirements most likely present?

Receiving and incorporating feedback on properly structuring new reports to fit with each institution's unique loan portfolio and ALLL methodology can be a challenge. Until the FASB provides more resources to answer common questions related to this, one solution for receiving specialized help is to reach out to external auditors or a loan review firm.

These new disclosure requirements have also boosted the workload related to the ALLL calculation and individual impairment processes. Some financial institution technology providers currently serving the ALLL market, including Sageworks, have developed template disclosure reports that are built with guidance from auditors, CPAs and loan review firms. These allow the institution to complete their ALLL calculation in the software and make a few clicks to access a fully completed disclosure report in accordance with the guidance from the FASB and suitable for proper reporting.

9. FASB'S NEW CECL MODEL: HOW IT IMPACTS THE ALLL

Since the precipice of the financial crisis, the FASB has been considering changes to the allowance model, due to criticisms that the current model does not adequately estimate losses until it is too late. Responding to those concerns and in an attempt to simplify [impairment guidance](#) for financial institutions, the FASB has issued several exposure drafts of proposed models to take into account “expected losses” rather than the current “incurred loss” model. On December 20, 2012, the FASB issued a new version of an exposure draft outlining a new “Current Expected Credit Losses” model with its Accounting Standards Update (ASU) Financial Instruments- Credit Losses (Subtopic 825-15).

The current U.S. GAAP-supported model, the incurred loss model, received many complaints, both before and after the financial crisis, when there was an obvious need for timelier recognition of credit losses. Under the incurred loss model, a financial institution would not record a loss until it is probable that the asset is impaired or if there has been a triggering event for an incurred loss.

In an attempt to improve upon the current model, the FASB released an exposure draft of Subtopic 825-15 outlining a “Three-Bucket” model, which attempted to break down credit

deterioration into three phases. This proposed model placed some loans into a “bucket” estimating losses on loans likely to default in the next 12 months. A second “bucket” held estimated losses over the “life of loan”, and a third “bucket” was for estimating losses on impaired loans. This proposal faced criticism due to the judgment that would still be required to differentiate between the first two buckets and because it still seemed to contain elements of the “loss recognition” threshold.

The FASB’s most recent exposure draft, released in July 2012, shies away from this “bucket” approach, but the International Accounting Standards Board, or IASB, is still considering the “Three-Bucket” model and issued an exposure draft of their guidance in the first quarter of 2013. The plan had been for the FASB and the IASB to issue a unified model, so it remains to be seen how the two differing models will be reconciled. For a more on IASB’s approach, see [Chapter 10](#).

What has changed?

The FASB’s newly issued exposure draft follows a model it calls the “Current Expected Credit Losses” (CECL) model.

Some of the main points of the proposed guidance include:

1. Requires that forward-looking information and forecasts now be considered in the estimation of credit losses. Current U.S. GAAP allows for present and past events but not future forecasts.
2. Removes the “probable” threshold for recognizing losses.
3. Incorporates Debt Securities under the same model rather than under the current “Other Than Temporary Impairment” (OTTI) model. Instead of a direct write-down, Debt Securities would be recognized through an allowance, which can be reversed if cash flow expectations improve.
4. Now allows for a Day One Allowance for Purchased Credit Impaired Assets.
5. Necessitates that methods must reflect time value of money explicitly or implicitly.
6. Modifies the definition of “collateral-dependent.”
7. Defines nonaccrual, cost-recovery and cash-basis methods, which were not clearly defined in GAAP.
8. Leaves the ASU 2010-20 essentially unchanged, other than requiring some additional disclosures.
9. Likely requires an institution to record a cumulative effect adjustment as of the beginning of the first period in which guidance is effective.

To see the complete listing of changes, it is recommended to read the proposal in its entirety. This list and e-Book include modifications, as of June 2013, that are most likely to impact financial institutions and their [ALLL reserves](#).

How CECL Impacts Financial Institutions

Forward-looking requirements

One of the major changes is the requirement to utilize more forward-looking information in estimates. Current GAAP guidance requires the use of past and present events, but the new guidance would require an institution to utilize future information and supportable forecasts to estimate the allowance. This could require more analysis of quantitative and [qualitative factors](#) that are specific to the borrower as well as economic scenarios. Accessing and modeling that data could be a hurdle for many financial institutions.

The guidance notes that it is difficult to predict the future, especially far into the future, which would be required in the estimation of losses over the lifetime of the loan (especially loans with a longer term).

“Probable” threshold removed

Another major, related change in the proposed CECL model is the removal of the “probable” threshold for loss recognition found in the current incurred loss model. Presently with the “probable” threshold, a financial institution is not required to record a loss until a loss on the asset is deemed to be “probable and estimable.”

CECL requires that an institution evaluate the possibility that a loss exists or that it does not. It should not use the “mode” or the most likely scenario, as is used in the current model. The CECL model does not go so far as to require a probability weighted analysis looking at more than two outcomes.

Longer loss horizon

With regards to originated loans, current practice is to estimate the losses over the next 12 months, which is often insubstantial. The incurred loss model estimates losses for loans likely to default in the next 12 months, which is considered “probable and estimable”, while the new guidance requires the institution to estimate losses over the lifetime of the loan for all loans. This would likely expand the loss horizons that an institution uses for estimating an allowance for its non-impaired loans and will likely cause the allowance

for non-impaired assets to rise from current levels.

Time value of money plays a role

The proposed guidance indicates that estimates must take into account the time value of money explicitly or implicitly. One way to explicitly incorporate the time value of money into the estimate is to use the discounted cash flow model for estimating cash flows on impaired loans and discount cash flows at the effective interest rate. To implicitly take into account the time value of money, a financial institution could use loss rate methods, roll-rate methods, probability of default methods or a provision matrix method using loss factors. It is not clear that these methods would be different intrinsically from methods that are used under the current guidance.

Collateral definitions

There are also some changes to the definition and application of guidance to collateral-dependent loans. The proposed guidance defines a collateral-dependent asset as:

A financial asset for which the repayment is expected to be provided primarily or substantially through the operation (by the lender) or sale of the collateral...

The FASB guidance broadens its definition from “solely” to “primarily or substantially”, which could expand the scope of assets evaluated under this method.

The guidance also clarifies that operation should only be considered if it is operated by the lender as opposed to the borrower. For loans considered collateral dependent due to operation, these loans would be considered without selling costs, which is unchanged from existing guidance. It is also stated that assets meeting this criteria are no longer required to be evaluated under the Fair Value of Collateral method, although it is unclear how else an institution would evaluate these assets. Overall, it does not appear that the new guidance holds much in the way of change for loans evaluated under FAS 114.

How CECL Affects Allowance Levels

Generally, allowance levels would likely rise with the implementation of this model, since institutions will now have to consider all losses that a loan will incur during its lifetime from day one. Many experts believe that the ALLL could increase by 10 to 50 percent, according to a survey conducted

by [SNL Financial](#). The actual amount will vary and will likely be determined by an institution's portfolio composition, current methodology, forecasts of future events, etc.

A one-time ALLL adjustment will likely be required since institutions are currently only setting aside one year's worth of expected losses. This is in line with current guidance except in the case of impaired loans, which are required to have their probable full loss amount set aside. This one-time adjustment could raise serious concerns for small community banks with limited capital, especially in light of the capital requirements under Basel III, which could possibly be implemented along the same timeline.

Most of the increase could be attributed to the fact that an institution would now need to utilize future forecasts to estimate losses and that it would need to utilize an estimate of "lifetime of loan" losses. This new methodology would cause an increase in reserve levels, particularly for the non-impaired portfolio (current FAS 5).

Additionally, the change that would require an institution to now hold a Day One Allowance for Purchased Credit Impaired Assets would also cause a rise in allowance levels,

although it would have a net-neutral effect on earnings, as the increase in reserves would also be added to the amortized cost of the loans.

The proposal would likely alter the patterns typical of provision levels throughout an economic cycle. As an institution using the CECL model would likely recognize losses earlier at the beginning of a downturn, its provision level would increase during this point in the cycle. Then during the downturn, there would most likely be a smaller provision since these losses would have already been recognized. Finally, there would be a higher provision coming out of the downturn rather than the allowance release typical under the current model.

In theory, this could provide for less volatility in the allowance. Some observers have pointed out, however, that the model could in fact cause higher volatility, particularly because of the difficulties around trying to estimate the impact of future events. There is some concern that added volatility in the allowance could be cause for requiring additional capital buffer on top of other, proposed capital requirement increases.

There is no timeline established yet for when the new

guidance would take effect. A timeline would be established after the issuance of final guidance subsequent to the comment period. Given the difficulties of reconciling the FASB guidance to IASB guidance, as well as concerns over other pending items that could affect capital requirements (like Basel III), some have speculated that a new “expected loss” model might not be in place until 2015 or 2016.

How to Prepare

It is expected that if and when new guidance is effective, an institution would likely need to record a one-time provision to account for the new methodology. But given that the guidance is yet unclear as far as what it will entail and when it will be implemented, there are no immediate steps an institution should take to modify its methodology.

It does, however, make sense for a financial institution to review its process, methods and infrastructures now to assess whether they are flexible enough to take into account these and other future changes. For example, current spreadsheet models may pose challenges in this regard, as they may need to be significantly overhauled to accommodate the changing

guidance. Institutions can use this deliberation time to discuss the potential changes with auditors or examiners to better understand how it will impact reserves.

The allowance has been a rising source of frustration for bankers in the last several years, as reporting and documentation requirements have grown more onerous, and it is not clear whether the new guidance will make this any worse. Change is always painful initially, but time will tell whether the new guidance helps in avoiding some of the issues from the past or simply presents a new and different set of challenges. See the next chapter for more information on possible implementation.

10. FASB VS. IASB: WHY CAN'T WE “ALL” GET ALONG

When the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) announced the Norwalk Agreement in 2002, it marked a significant step toward formalizing their commitment to the convergence of U.S. and international accounting standards. The recent global financial crisis highlighted the need for more timely recognition and financial reporting of credit losses than what was offered with the incurred loss approach. To address it, the FASB and the IASB submitted a joint proposal in 2011, commonly known as the three-bucket impairment model. They continued to develop a common impairment model through July 2012. At that time, the divergence began as a result of the FASB expressing concerns that the three-bucket approach was too complex and difficult to understand. Each board then set out to develop their own exposure drafts.

The Need for Change

Among the weaknesses highlighted by the financial crisis was the need for more timely recognition and financial reporting of [credit losses](#) than what is offered with the incurred loss approach presently employed. Consequently, the FASB and the IASB, the standard-setting body of the International

Accounting Standards Committee (IASC) Foundation, have both set out to improve guidance for accounting for these losses in both U.S. Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS).

An important component of these efforts was to develop a more forward-looking “expected loss” approach for recognizing credit losses. Efforts to develop this revised approach were originally undertaken by the FASB and the IASB collectively, with the intent of not only improving but also converging the US and international accounting guidance. However, in recent years, a divergence between the two constituencies has resulted in two different model proposal drafts, both with pros and cons. This has left many industry players [seeking clarification](#) on the models’ differences and questioning if and when a re-convergence will occur.

For a detailed explanation of the CECL Model, see [Chapter 9](#).

About the Credit Deterioration Model

On March 7, 2013, the IASB released a new exposure draft,

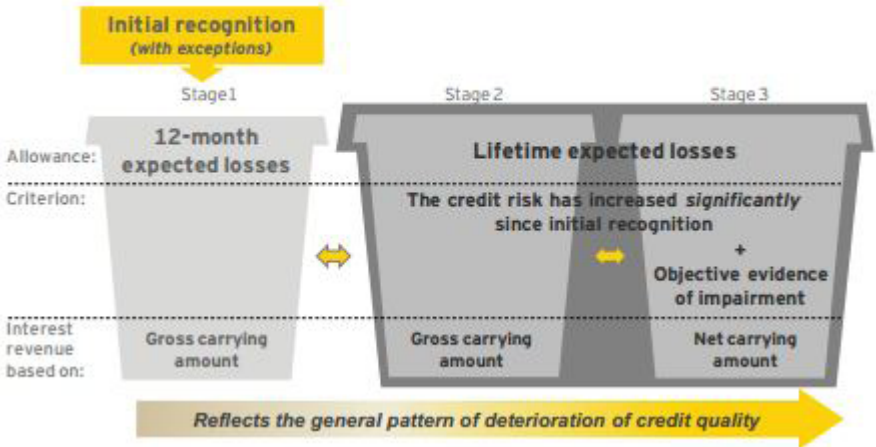
Financial Instruments—Expected Credit Losses, wherein they proposed that entities should recognize and measure a credit loss allowance or provision based on either a 12-month expected credit loss or, if the credit risk has increased significantly since initial recognition, the credit losses would be measured as the lifetime expected credit losses. Unlike the FASB, which has elected to develop the aforementioned alternative model with a single measurement objective due to concerns raised by its constituents, the IASB’s exposure draft builds upon the three-bucket expected credit loss model originally drafted and agreed upon by the boards jointly, only simplified to reflect feedback received from interested parties. The IASB’s revised model has become commonly referred to as the credit deterioration model.

All entities holding financial assets and commitments to extend credit would be affected by this proposal, with the model applying to loans, debt securities and trade receivables, as well as lease receivables, irrevocable loan commitments and financial guarantee contracts.

Essentially, the IASB’s credit deterioration model identifies three different stages (or “buckets”), which reflect the general pattern of the deterioration of a financial instrument that

ultimately defaults. The differences in accounting for each stage relate to the recognition of expected credit losses and, for financial assets, the calculation and presentation of interest revenue. For more detail, see the graphic below or the whitepaper, [FASB vs. IASB Proposals: Can't We "ALL" Just Get Along?](#)

Summary of the proposed expected credit loss model



Source: Ernst & Young's IFRS Developments: IASB proposes new expected credit loss model

The Credit Deterioration Model's Impact on Allowance Levels

The credit deterioration model would likely cause allowance

levels to rise, albeit less than the CECL model. The difference lies in the fact that CECL projects expected losses over the life of all loans. The credit deterioration model, meanwhile, only calls for a projection of 12 months for loans that have not shown evidence of credit deterioration since origination (would still look at life of loan for those that have). Essentially, it is the loans that you're allowed to only project out 12 months, as opposed to life, that make the difference in expected reserve amounts between the two models.

The CECL Model vs. the Credit Deterioration Model

Each of the two models has their own unique characteristics, and as a result, there are a number of pros and cons for each.

The FASB's CECL Model

Pros:

- Forward-looking requirements
- Immediate write-offs
- Improved definitions of interest income, collateral-dependent, etc.

Cons:

- Lack of clarity on how to calculate future expected losses
- Potential for large, immediate increase in allowance levels
- The IASB feels this approach states originated assets as below fair value

The IASB's Credit Deterioration Model

Pros:

- Forward-looking requirements
- Immediate write-offs
- Does not require lifetime losses for pass-rated loans
- Includes financial guarantee contracts

Cons:

- Lack of clarity on how to calculate future expected losses
- Ambiguity surrounding Stage 2 classification
- CECL model seems to be clearer in terms of purchased credit-impaired (PCI) financial assets

Re-Convergence?

Since the Norwalk agreement in 2002, the intentions of the FASB and the IASB have been to ultimately align, not just on the measurement of the ALLL and credit losses, but on all other standards of accounting and financial reporting as well. But the current divergence suggests this may be difficult to achieve as long as we lack any true driving force to make the goal a requirement. It may very well take the precipice of another financial crisis to drive the FASB to re-converge with the IASB.

In regards to the CECL model versus the credit deterioration

model, the two sides will review comments together. Hopefully, the diversity of these groups along with quality comment letters will lead to clarifying the ambiguity surrounding both models. However, current industry analysts believe it is unlikely the boards will re-converge in the end. In fact, they may grow farther apart as additional weaknesses of each model are uncovered in the comment letters.

As a result, we expect individual implementations from each side. But if re-convergence does occur, that would delay further any implementation because a new joint release and another deliberation period would be required.

Implementation Timeline

Assuming the two proposals are not modified into one, implementation from the FASB would start with a release of final guidance, which could be anytime from late third quarter 2013 to second quarter 2014. Implementation requirements would likely be staggered, with the first financial institutions required to implement as early as first quarter 2015. The tiers would likely be based on either asset size or public vs. private entity or a combination of the two. With a tiered timeline, complete implementation could take until first half of 2017.

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