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KPMG LLP Credit Risk Management Practices 2012 Survey on the Allowance for Loan and Lease Losses

May, 2013

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Dear Colleagues:

Heightened regulation and economic shocks have greatly complicated the estimations of required capital and Allowances for Credit Losses (ALLL). Estimation practices for the ALLL now require more complex models and increasing levels of management technical expertise. All the while, requirements to document the art and science of the allowance estimate continue to expand.

Faced with these dynamics, many banks find it challenging to establish an ALLL estimation process that is transparent and meets expectations of internal and external stakeholders including regulators, external auditors, internal auditors and shareholders.

To help with these challenges, the KPMG LLP Credit Risk Management practice commissioned a survey of U.S. banks to provide insight into prevalent practices for ALLL processes, estimation techniques, key assumptions, and documentation, results of which are summarized in this white paper.

We believe that readers will find this paper informative. As an added value, a link to more detailed survey results in the form of a presentation is found at the end of this paper.

Sincerely,

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Executive Summary

KPMG LLP Credit Risk Management Practices 2012 Survey on the Allowance for Loan and Lease Losses (ALLL)

Our survey and daily participation in this technical area tell us that ALLL methodologies vary greatly across financial institutions. While the recent credit crisis has exposed various weaknesses in Bank ALLL methodologies, these weaknesses have manifested across all ALLL methodology types. In our experience, the success of a bank's ALLL estimation process has been driven less by the type of methodology used, and more by the accuracy of the assumptions used to generate the loss estimate. Based on this logic, we suggest reviewing the survey results in that context. While the answers to individual questions are informative, the answers must be considered in the context of your bank's methodology. The best solution for one bank may not be the best solution for another bank.

A total of 108 diverse financial institutions responded to our survey. We separated respondents into three categories based on asset size:

Small – up to $5 billion

Medium – greater than $5 billion to $50 billion

Large – greater than $50 billion

We present our findings in the context of these topical sections:

1. Commercial Quantitative Methodology
2. Consumer Quantitative Methodology
3. Risk Rating Systems
4. Methodology for Qualitative Reserves
5. Troubled Debt Restructures, Nonaccrual and Impairment
6. Model Validation and Backtesting

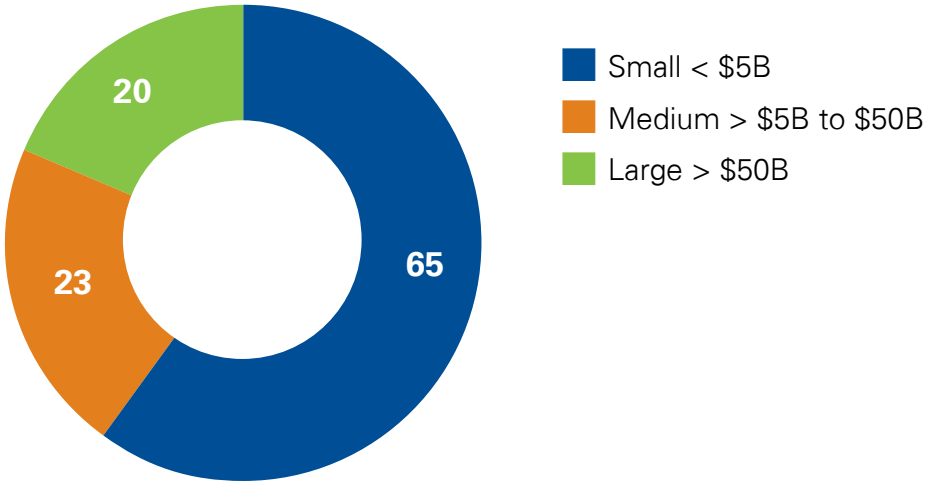
IMPORTANT NOTE: Each of the 108 respondents did not answer every question. Therefore, respondent totals for various questions may vary from question to question.

Presentation of Findings

Asset Size

For our analysis, we segmented the 108 respondents based on asset size in recognition that bank practices often vary by the size and complexity of the financial institution. The three size categories we used were institutions with total assets less of $5 billion or less (small), greater than $5 billion to $50 billion (medium), and greater than $50 billion (large). Based on this segmentation, 19 percent of respondents are large institutions, 21 percent of respondents are medium institutions, and the remaining 60 percent of respondents are small institutions.

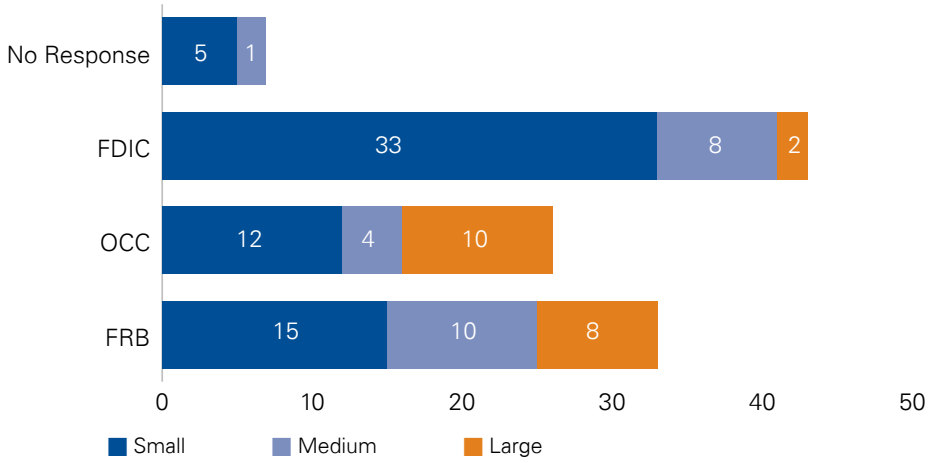
Table 1–Size of Financial Institution



Primary Regulator

While the federal banking regulators are largely aligned in their expectations for ALLL methodologies, some differences remain. The respondents in our survey identified their primary regulator as follows: FDIC (43 percent), FRB (33 percent) and the OCC (26 percent).

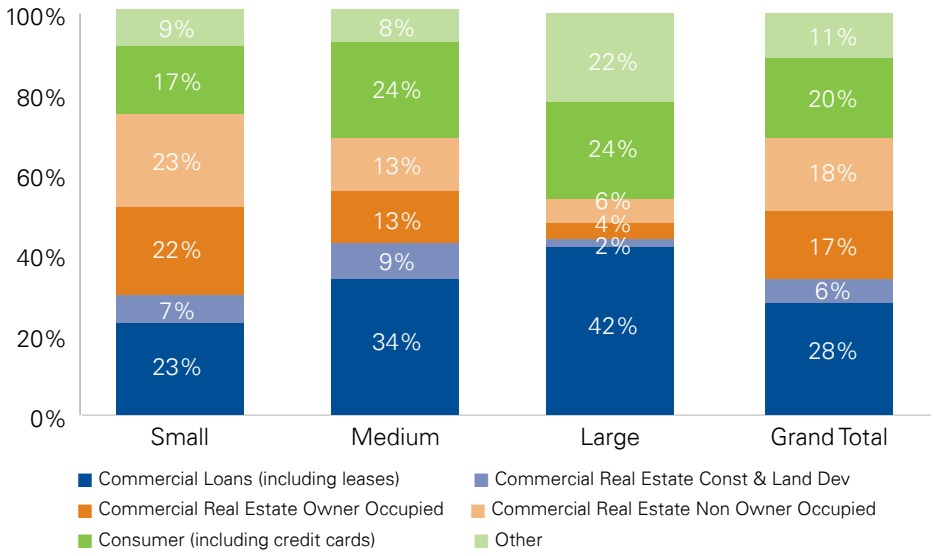
Table 2–Primary Regulator by Number of Respondents



Portfolio Composition

The survey asked respondents to provide information on portfolio composition. As might be expected, smaller banks continue to have a higher concentration of real estate loans.

Table 3–Portfolio Composition by Size of Institution



Basel

In relation to Basel II, there are 17 banks that are either Basel Mandatory or Opt-in banks, the majority of which fall into the large category, as is expected. There are four Basel banks that fall outside the large category; two are small and two are medium.

Geography

Our respondents are heavily concentrated in U.S. headquartered institutions (100), with eight of the banks being headquartered overseas. The overseas banks are all in the large category with the exception of one medium-sized institution.

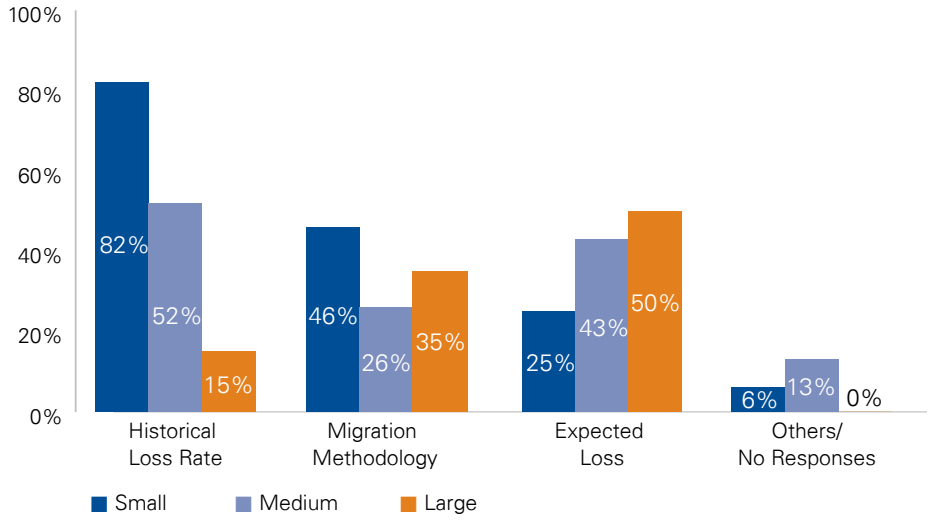
To provide clarity as to how the ALLL is determined in these overseas banks, we asked for the location of responsibility for the ALLL calculation. One bank receives its ALLL calculation from the parent, two determine the ALLL locally using component factors determined by overseas headquarters, and the remaining five determine the ALLL locally.

Section 1
Commercial Quantitative Methodology

The recent credit crisis has exposed weaknesses in quantitative ALLL methodologies. KPMG has seen these weaknesses manifest themselves across all types of ALLL methodologies and in all sized institutions. Based on our experience with a range of clients, the success of a bank's ALLL estimation process is driven by the quality of the methodology's conceptual logic, reliability of source data, and accuracy of assumptions in the context of the portfolios being modeled.

Our survey shows that, post crisis, there is still a wide array of quantitative ASC 450-20/FAS 5 ALLL methodologies used:

Table 4–Type of Quantitative Methodology Used



Note that many respondents selected more than one type of quantitative ALLL methodology.

As a result, the ALLL survey focused on the key elements that drive the quantitative methodologies used by our respondents:

1. Segmentation criteria
2. Loss emergence period (LEP)
3. Look-back period (LBP)
4. Unfunded commitments
5. Point-in-time (PIT) or Through-the-cycle (TTC) risk rating approach

Element #1: Portfolio Segmentation Criteria

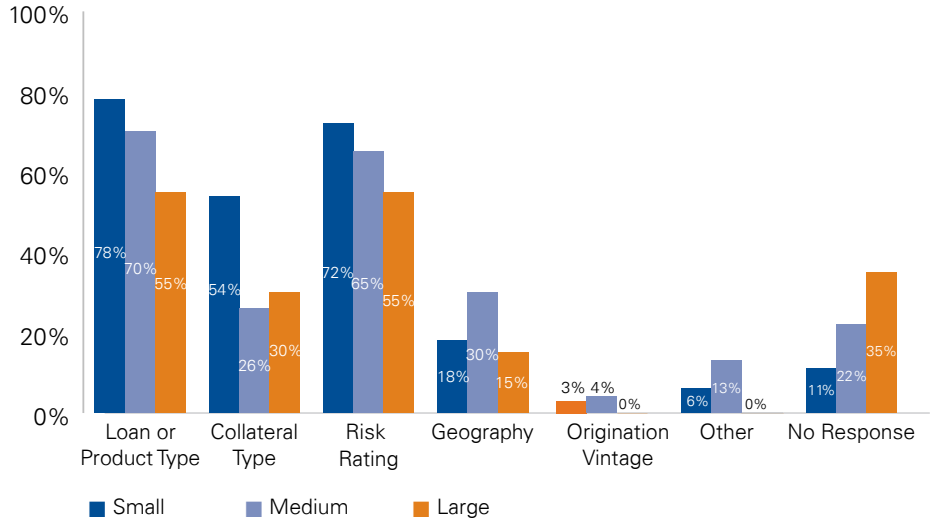
In loss estimation models, appropriately identifying the key drivers of the risk of loss is critical to the success of the model.

The choice of segmentation criteria is highly dependent on model complexity and how segmentation criteria is incorporated into the model. For example, an econometric model that captures many financial and economic indicators may effectively capture differences in geography, whereas a simpler methodology may need to formally

segment by geography. Financial institutions should analyze these results in the context of their chosen ALLL methodology.

We note that the most common segmentation criteria are loan/product type (88 percent) and risk rating (82 percent), followed by collateral type (53 percent) and geography (25 percent). These results were fairly consistent across the three sizes of institutions.

Table 5–Portfolio Segmentation Criteria



Element #2: Commercial Loss Emergence Period

The Loss Emergence Period (LEP) assumption represents a bank's estimate of the average amount of time from the point at which a loss is incurred to the point at which the loss is confirmed, either through the identification of the loss (i.e., FAS 114 / ASC 310 reserve) or a charge-off. While the starting point of the LEP is often hard to determine or not known, declaration of technical default (covenant breach) or downgrade from a pass rated credit is often used as a proxy for commercial loans.

The LEP is a critical assumption in an allowance estimate. If the LEP is too short, the reserve may be understated as certain inherent losses will not be recognized. Conversely, if the LEP is too long, the reserve may be overstated, as it would likely include losses associated with defaults that had not yet been triggered as of the financial statement date.

Regulatory and accounting guidance is not overly prescriptive as to the length of LEP assumptions as illustrated by this excerpt from previously issued OCC Advisory Letter[1] regarding how to analyze coverage for pools of loans:

1 OCC 97-8 – Allowance for Loan and Lease Losses, replaced by OCC 2001-37 and OCC 2006-47

"Many banks generally consider coverage of one year's losses an appropriate benchmark for most pools of loans because the probable loss on any given pool should ordinarily become apparent in that time frame. Banks may be able, however, to demonstrate that they can rely on something less than 12 months coverage if they have good management information systems, effective methodologies for estimating losses, and are not masking problems in the pool (e.g., "curing" or "re-aging" delinquencies that have not met appropriate criteria). They also must recognize losses in accordance with regulatory charge-off criteria.

For other banks, more than 12 months coverage may be appropriate.

Bankers and examiners should verify the reasonableness and accuracy of loss estimation methodologies. "Back testing" should be considered to evaluate the accuracy of loss estimates from prior periods. Examiners will also employ ratio and other analysis techniques to identify diverging trends between allowance coverage ratios and credit risk indicators. When examiners encounter flawed loss estimation methodologies and results, and/or inappropriate "curing/re-aging" and loss recognition practices, loss coverage of more than 12 months may be justified.

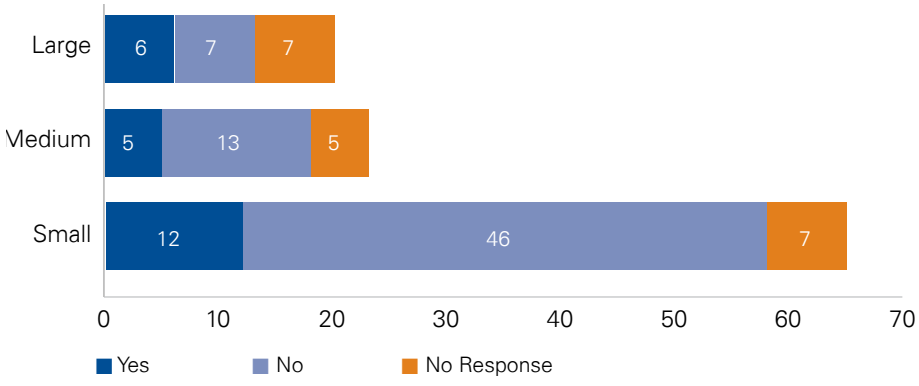
When examiners identify deteriorating trends in allowance coverage ratios, management's analysis will be thoroughly tested and the allowance adjusted, if appropriate."

While published regulatory guidance has been more conceptual than proscriptive, KPMG's has observed that regulators, internal auditors, and external auditors have more detailed expectations that banks will track historical data in order to measure LEP by major loan type. Many institutions report hearing from their primary regulators that an LEP of longer than one year for commercial loans may be more appropriate.

KPMG's experience is that the LEP tends to become shorter in times of economic distress and lengthen during more benign economic periods. We expect that banks will continue to refine their analysis of the LEP for various loan types, and that stakeholders will continue to have heightened expectations relative to LEP measurement and underlying support.

Based on the survey results, larger banks are more likely to determine the LEP (46 percent) compared to medium-sized banks (28 percent) and small-sized banks (21 percent).

Table 6–Loss Emergence Period Determined



For those banks that do not formally derive an LEP for their own portfolio, we often see that the LEP for those banks defaults to 12 months.

For the 23 respondents that indicated that they derive the LEP, the average commercial LEP was roughly 2.6 years or 31 months. These results are generally consistent across the various types of commercial loan types as indicated in the following table:

Loan Type	Median LEP in Months	Average LEP in Months
Commercial Loans	33	31
CRE Loans	33	32
Multi-Family Loans	33	32
Commercial Leases	25	26
A&D Loans	33	32

Note that under the current exposure draft[1], the LEP concept would be eliminated and replaced with a life of loan concept.

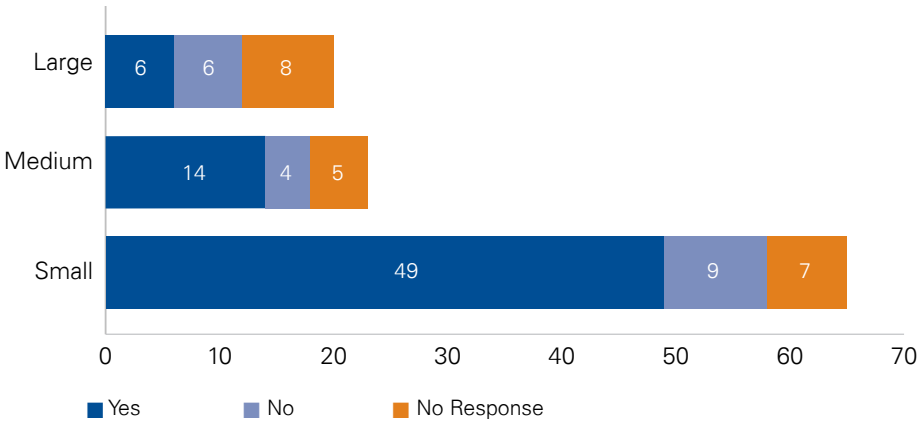
Element #3: Commercial Look-Back Period

The look-back period assumption represents the historical data period utilized in the ALLL process to calculate the estimated loss rates that are applied to portfolio exposure as of given financial reporting date.

KPMG has observed that less sophisticated methodologies (such as historical loss factor approach by segment) tend to use a shorter look-back period to better reflect recent economic conditions (one to three years). More sophisticated approaches, particularly those that segment by risk rating (commercial) and/or underwriting characteristics (retail) tend to use a longer look-back period (three to seven years) as the models are often able to capture changes in borrower behavior as they move through an economic cycle.

The majority of survey respondents (70 percent) indicated that they have a specific look-back period used in determining loss rates.

Table 7–Look-Back Period



1 FASB Proposed Accounting Standards Update, Financial Instruments—Credit Losses (Subtopic 825-15)

For the 69 respondents that indicated they do have a specific look-back period for commercial loans, the median and average look-back period (LBP) by commercial loan type is listed in the following table:

Loan Type	Median LBP in Months	Average LBP in Months
Commercial Loans	36	36
CRE Loans	36	36
Multi-Family Loans	36	36
Commercial Leases	30	32
A&D Loans	36	36

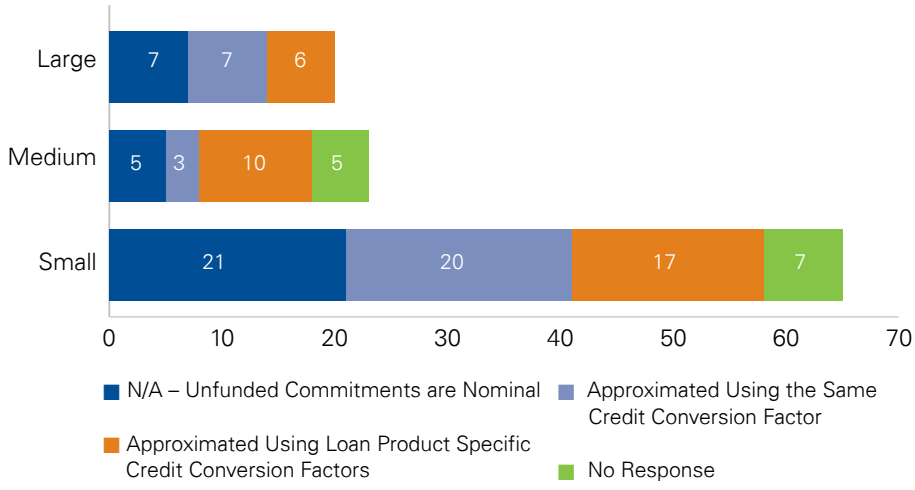
A small subset of the 69 respondents indicated that they use a much longer LBP, which typically encompasses one or more full economic cycles in an attempt to capture long-term average default and loss rates. These banks often require use of significant qualitative adjustments to capture the impact of more recent economic conditions on portfolio performance.

Element #4: Unfunded Commitments

For many financial institutions, unfunded commitments comprise a significant portion of an institution's credit risk. As a result, the ability of management to effectively estimate the risk associated with this source of the institution's credit losses is critical to the accuracy of their overall credit loss forecasts. However, many organizations struggle with appropriately estimating the risk associated with these commitments given the limited availability of internal performance data, highly idiosyncratic loan behavior, the lack of consistency in external benchmarks, and volatile parameter estimates for credit conversion factors through an economic cycle.

In KPMG's experience, while some institutions empirically estimate credit conversion factors and update these parameter estimates on a periodic basis, many institutions judgmentally determine the factors based on a combination of benchmark and internal data. These institutions tend to update these factors relatively infrequently.

Table 8–How Is the Reserve for Unfunded Commitments Determined?

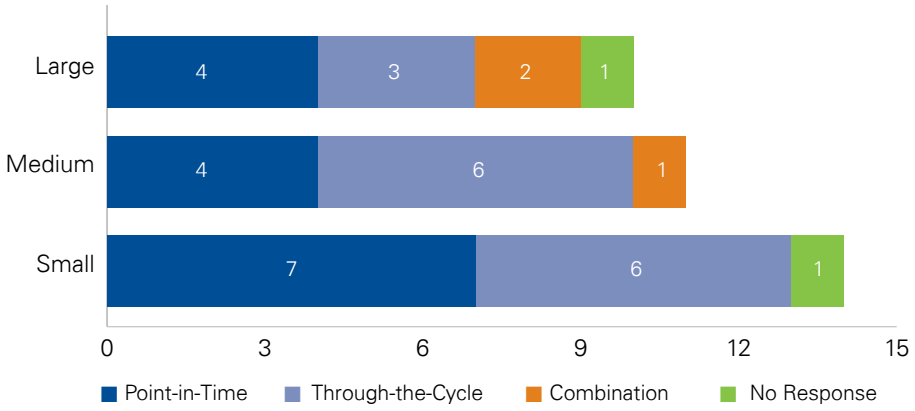


Additionally, the granularity in which institutions estimate credit conversion factors is a key differentiator across banks, as indicated by our survey results in which 47 percent of respondents use the same credit conversion factor across various loan products and 53 percent use loan product specific credit conversion factors.

Element #5: Point-in-Time or Through-the-Cycle risk rating approach

In any ALLL methodology, a key decision is whether to use a point-in-time or through-the-cycle risk rating methodology. We note that using a TTC approach involves use of a longer historical data set and as such, greater qualitative considerations are typically needed in order to adjust a TTC based ALLL estimate to reflect current economic conditions.

Table 9–For PD Calculation in the Expected Loss Methodology, How Is PD Calculated?



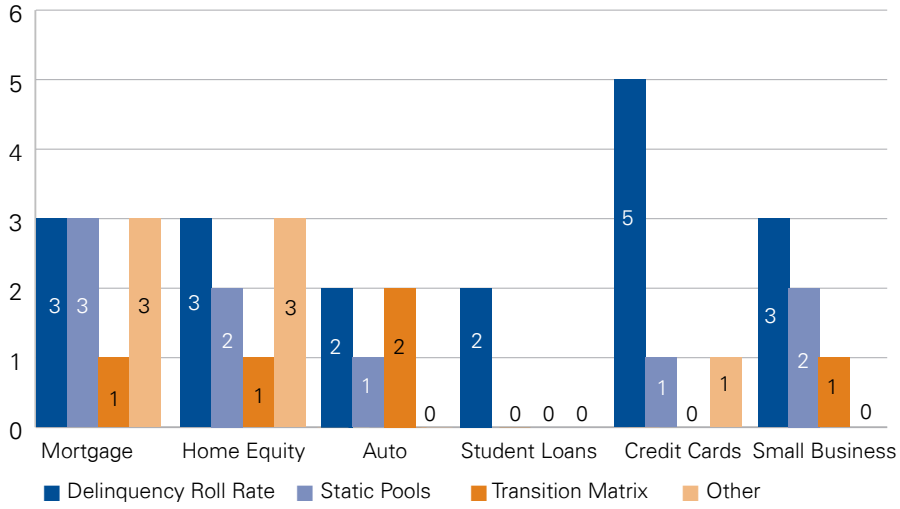
As a result, for this question, we focused more on those respondents that use an expected loss methodology, which were 35 of the 90 respondents that answered the question (39 percent). For these 35 respondents, roughly half use point-in-time and half use through-the-cycle.

Section 2
Consumer Quantitative Methodology

Institutions may use the same ALLL methodology for both their commercial and consumer portfolios, or they can use distinct approaches. Based on the survey results, the majority of banks use the same methodology with only 16 of the 108 respondents reporting separate commercial and consumer methodologies.

Collectively, the 16 respondents reported 42 separate consumer methodologies across 6 product types (Mortgage, Home Equity, Auto, Student Loans, Credit Cards, and Small Business). Methodologies for measuring loss rates under ASC 450-20/FAS 5 for consumer loans range from use of historical loss rates to transition matrices, static pool analysis, and delinquency roll rate models. There was no clear preference for the type of mathematical / statistical model used for any product type. We also note the majority of the 16 respondents used models developed in-house vs. external vendor models regardless of model type.

Table 10–Type of Mathematical/Statistical Consumer Model



Additionally, loan level data was commonly used in these models as opposed to pool level data.

Element #1: Consumer Loss Emergence Period

The LEP differs by consumer product types. Survey results indicate that residential mortgage products have a median LEP of 21–24 months while most other consumer products average a shorter LEP of 12–18 months. The significant deviation between the median and average for the mortgage and home equity products is driven by one institution that reported using a 100-month LEP for both products.

Product	Median LEP in Months	Average LEP in Months
Mortgage	21	34
Home Equity	24	37
Auto	14	19
Student Loans	24	24
Credit Cards	12	14
Small Business	18	21

Based on survey results and our knowledge of industry practices, many banks use a 12-month LEP for retail loans with a minority of banks using a longer LEP for certain products where data is available to support the longer LEP.

Element #2: Consumer Look-Back Period

Considerations for LBP assumptions for consumer portfolios are generally driven by two considerations:

- Relative portfolio risk: Those portfolios that typically have higher loss rates generally have shorter look-back periods.
- Sophistication of methodology: Those portfolios that use simpler methodologies such as historical loss factors tend to have a shorter look-back period to better reflect recent economic conditions, where more complex approaches tend to have a longer look-back period to capture a wider range of data in the estimation data-set used to capture borrower performance.

Based on survey respondents, the average look-back period across consumer products ranged from 34 to 54 months (2.8 to 4.5 years).

Product	Median LBP in Months	Average LBP in Months
Mortgage	30	34
Home Equity	36	37
Auto	60	53
Student Loans	54	54
Credit Cards	24	35
Small Business	48	42

Section 3
Risk Rating Systems

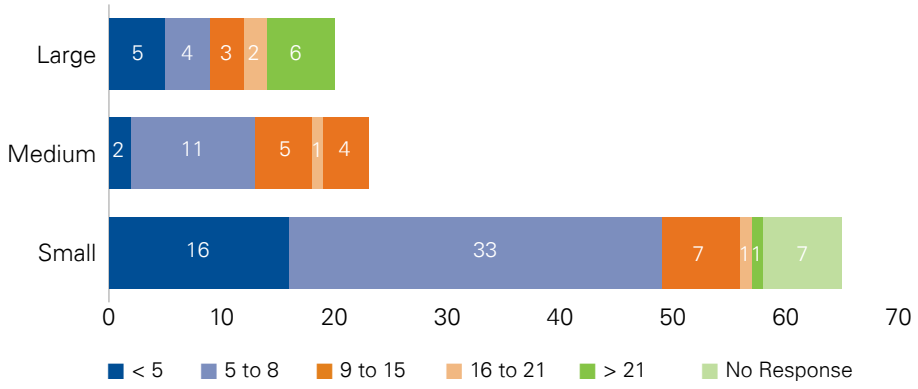
Risk ratings are a primary segmentation criteria used in the ALLL estimation process for ASC 450 (FAS 5) or general reserves, particularly for commercial loans. The effectiveness of risk ratings as a segmentation tool is dependent on the granularity of the risk rating system and the precision in which an institution's processes and / or models are able to determine a rating. For example, having a risk rating system with 20 grades is not very effective if 50 percent of the obligors are clustered in two or three grades.

Risk ratings are also a critical tool for financial institutions to track concentrations of portfolio exposure over time; both to facilitate understanding of changes in portfolio risk over time, but also to potentially identify the need for periodic recalibration of the risk rating system. Periodic validation and recalibration are necessary to improve the segmentation of borrower risk to better predict borrower and loss behavior over time.

The underlying theoretical approach to risk rating system design is a critical risk rating framework element. Some institutions have designed their risk rating system to reflect the point-in-time (PIT) risk of a borrower, while others use a through-the-cycle (TTC) methodology more analogous to the rating agency systems. These design choices are explicitly captured through the methodology and/or the look-back periods used to source data and are discussed in more detail in Section 2 above.

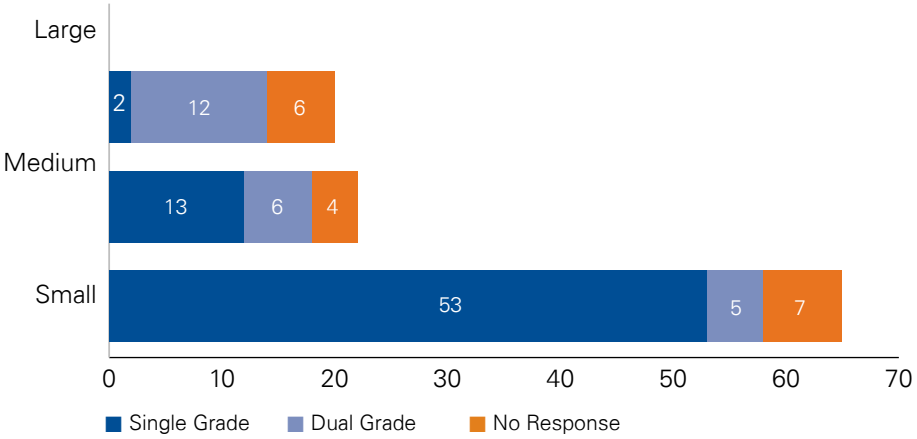
Within the risk rating framework, a key variation across financial institutions is found in the number of pass ratings that the institution includes in its risk rating system. Although there is a wide variation in the number of pass ratings across institutions of all sizes, the number of pass ratings is positively correlated with size of the institution. Based on the survey results, 75 percent of large institutions have more than eight pass ratings, but only 43 percent of medium-sized institutions and 25 percent of small institutions have more than eight pass ratings.

Table 11–How Many Pass Risk Ratings Are in the Risk Rating System?



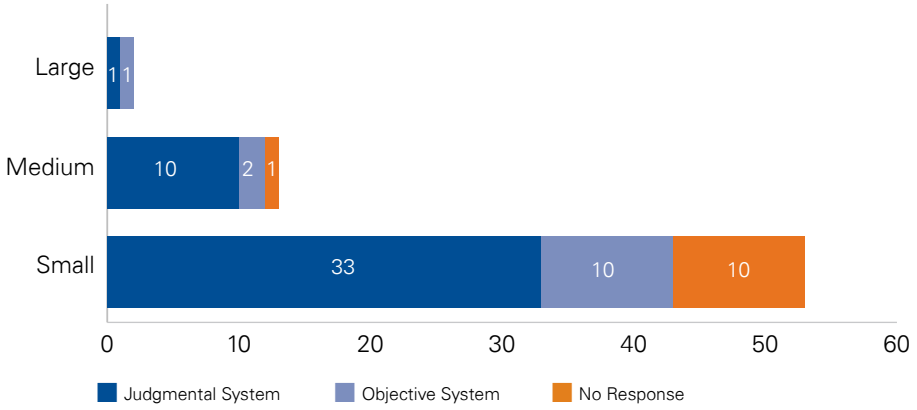
Another critical component of a bank's risk rating system is whether or not the institution uses a single grade or a dual grade risk rating system. Many of the largest banks use a dual grade system in part because of Basel II requirements, but also because the dual grade system allows for more precision in the estimation of loss. Respondents that use a single grade system tend to be smaller, where the incremental cost of maintaining a dual grade system may exceed the benefits. Based on our survey results, 86 percent of large banks use a dual grade system, whereas only 32 percent of medium-sized banks and 9 percent of small-sized banks use a dual grade system.

Table 12–High-Level Description of the Risk Rating System



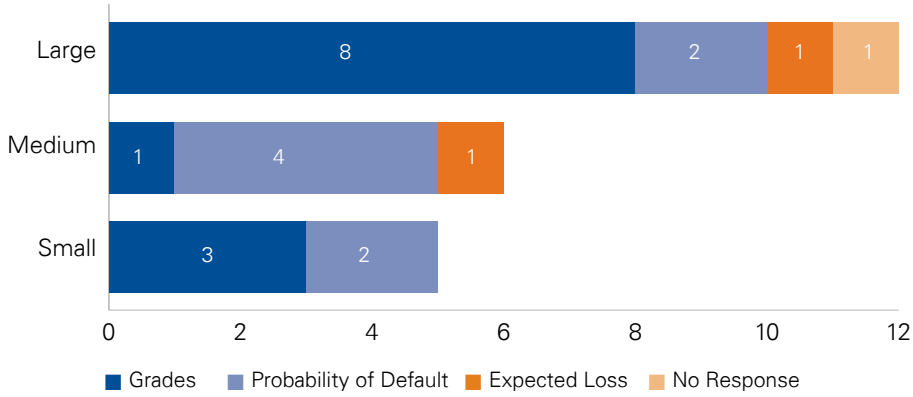
For those respondents that use a single grade system, we asked if they would consider their risk rating assignment process to be largely driven by judgement or by objective analysis (scorecard approach that automatically generates a risk rating). We consider judgmentally driven risk rating systems to be those where the person assigning the rating is driving the risk rating assignment process. While some templates and/or rating grids with risk rating definitions may be used to facilitate consistency across ratings, the risk rating assignment primarily rests in the hands of the person analyzing the credit. For objective systems, these are typically defined as primarily scorecard and/or model driven, where the person analyzing the credit may adjust the scorecard/model process up or down based on risk factors not incorporated into the methodology. Out of the survey respondents who use a single grade system, 23 percent described their system as primarily objective, whereas 77 percent described their system as primarily judgmental.

Table 13–For Respondents with Single Grade Systems, Describe the System



For those respondents that use a dual grade system, we asked how they mapped their system to the regulatory grades (Special Mention, Substandard, etc.).

Table 14–How Are Dual Grade Systems Mapped to Regulatory Risk Ratings?

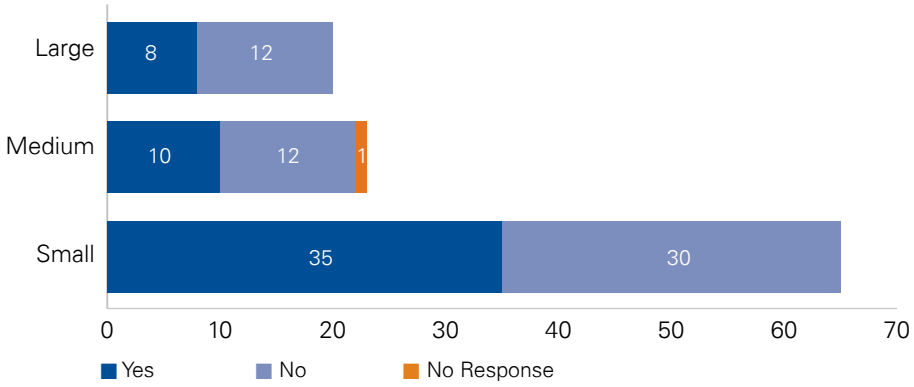


The majority of respondents (57 percent) map their internal risk grades to the regulatory grades, while the remaining banks directly map probability of default (38 percent) or expected loss (5 percent) to the regulatory grades.

Section 4
Methodology for Qualitative Reserves

The qualitative and unallocated components of the ALLL are designed to estimate risk factors that are not fully captured by a bank's quantitative models. Unallocated components are typically tied to risks that are difficult to quantify (e.g., impact immediately after natural disaster). The 2006 Interagency Guidance[2] enumerates a number of qualitative factors (commonly referred to as "Q" factors) that banks should consider when determining the ALLL estimate. Since the issuance of this guidance, many institutions have replaced some or all of their unallocated reserves with these qualitative reserves. However, roughly half of institutions continue to have both a qualitative allowance and an unallocated, although the unallocated tends to be smaller relative to the size of the qualitative reserve in a typical quarter.

Table 15–Do You Use Both a Qualitative Reserve AND an Unallocated Reserve?



Of the 53 respondents who indicated that they have both Qualitative and Unallocated Components to the ASC 450 / FAS 5 reserve, 39 respondents provided additional information as to whether or not their primary regulator was satisfied with the company's use of both a qualitative allowance and an unallocated. Of these 39 respondents, 79 percent indicated that their primary regulatory was satisfied with the bank's approach, while 5 (13 percent) indicated that the Unallocated was subject to a limitation, and 3 (8 percent) indicated that either the primary regulator or external auditor was not comfortable.

In considering qualitative factors, most institutions (64 percent) consider a majority (at least 7 of 9) of the qualitative factors enumerated in the 2006 interagency guidance. A total of 14 respondents indicated that they considered 'other' factors not specified in the regulatory guidance. However, we do note that a significant number of institutions reported that they do not explicitly capture all of the qualitative factors identified in the regulatory guidance.

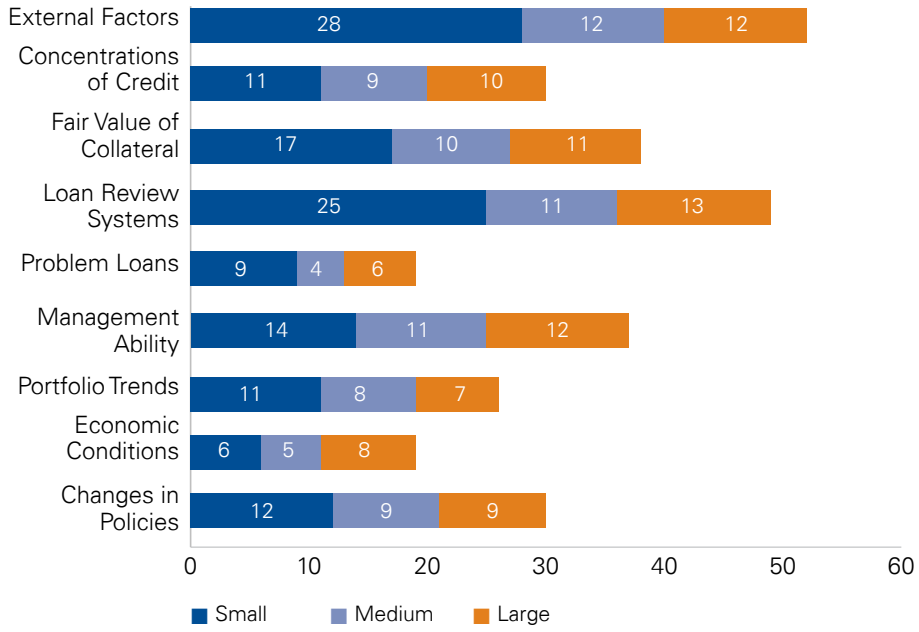
Based on the survey results, the following five factors were not specifically addressed by a large number of survey respondent banks: external factors (48 percent), loan review systems (45 percent), fair value of collateral (35 percent), management ability (34 percent), and concentrations of credit (28 percent).

We also note that smaller banks were more likely to cover all of the qualitative factors relative to larger banks. Based on KPMG's experience, this observation is likely

2 OCC 2006-47, Interagency Policy Statement on the Allowance for Loan and Lease Losses

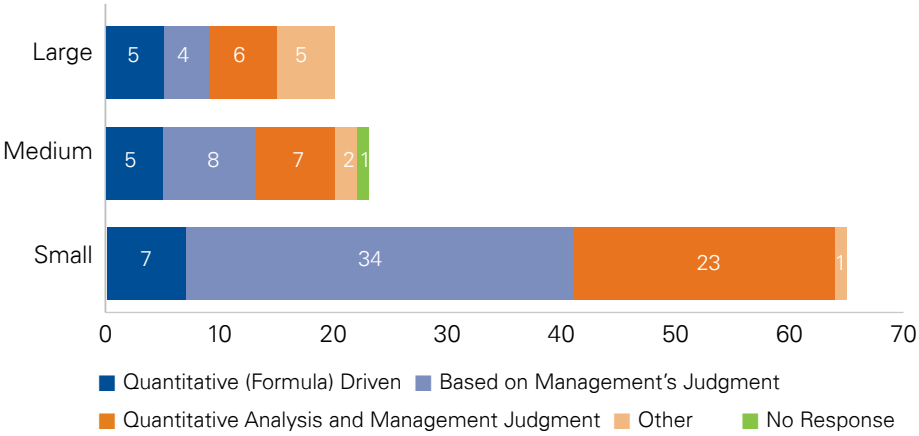
driven by the increased sophistication of the larger banks' methodologies such that additional adjustments for some of these factors may not be warranted. While not including all factors in the regulatory guidance may be reasonable, banks are generally expected to be thorough in documenting the rationale behind why those factors are fully captured by the bank's quantitative methodology.

Table 16–Qualitative Factors Not Considered



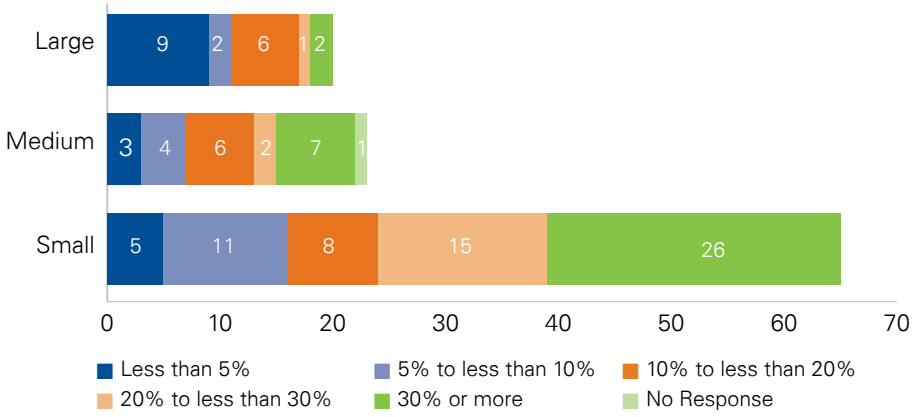
In addition to the diversity in factors analyzed as part of a bank's qualitative factor process, there is also considerable diversity in how banks determine their qualitative factors. Smaller banks tend to rely more on management judgment (53 percent), compared to medium-sized banks (36 percent) and larger banks (20 percent). These results are consistent with KPMG's experience that larger banks tend to have a more transparent and well-defined process that is structured and repeatable over time, whereas smaller banks rely more on the specific expertise of the risk officers.

Table 17–How Are Qualitative Factors Determined?



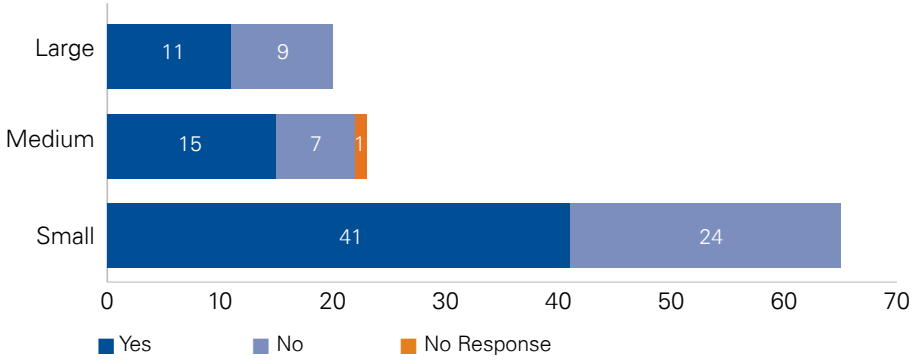
There is also considerable diversity in the size of the respondent bank's total qualitative and unallocated component. Many banks (33 percent) have a qualitative and unallocated component greater than 30 percent, although we note that this percentage shrinks to 10 percent for large banks. Conversely, 16 percent of banks reported a qualitative and unallocated component of less than 5 percent, although this percentage increases to 45 percent for large banks. Based on KPMG's experience, those institutions with qualitative reserves larger than 20–25 percent of the quantitative methodology generally face additional scrutiny from regulators and auditors and require more precise documentation supporting these relatively larger qualitative and unallocated components.

Table 18–Qualitative and Unallocated Component of the ALLL as a percent of the Total ASC 450-20/FAS 5 ALLL



When assessing the reasonableness of qualitative/unallocated reserves, KPMG believes it is important to look at the relative size of these reserves to the overall ALLL. Additionally, we believe that the trend and level of such reserves should be "directionally consistent" with the bank's asset quality trends and relative to changes in prevailing conditions. However, based on the survey results, 40 respondents reported that they do not consider directional consistency in their qualitative analysis of the ALLL. As regulatory scrutiny around the allowance continues to be high, we would expect more banks to consider evaluation of directional consistency in the future.

Table 19–Is the Qualitative Component of the ALLL Evaluated for Directional Consistency?



Section 5
Troubled Debt Restructures, Nonaccrual, and Impairment

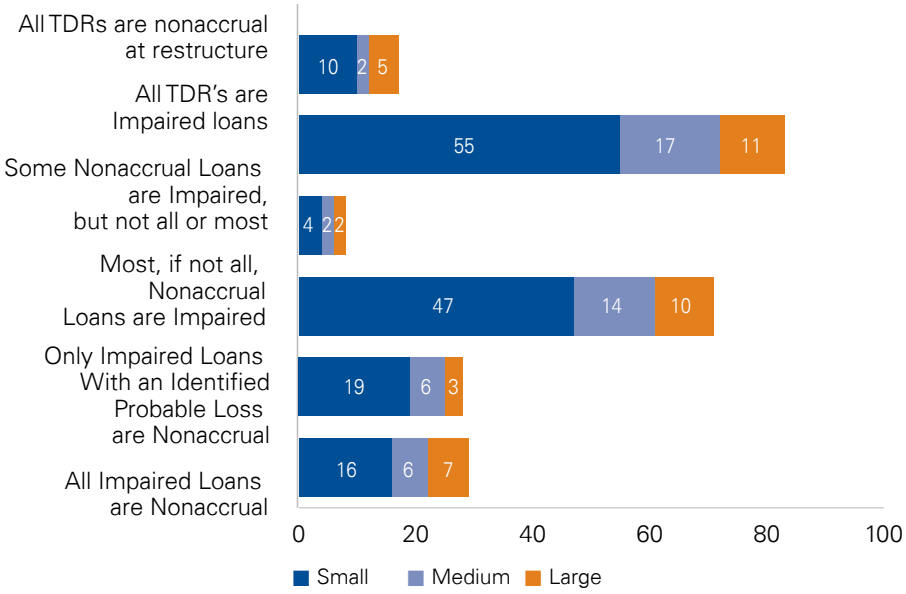
There has been additional scrutiny from regulators around identifying and reporting Troubled Debt Restructures (TDRs). New regulatory guidance was issued in 2012[3], to provide more clarity around what constitutes a TDR and how to measure TDRs. We asked respondents a number of questions around key TDR practices.

Banks continue to be challenged by the dependencies posed by TDR reporting, compliance with ASC 310-10, and the designation of nonaccrual loans including but not limited to:

- When TDRs should cease to accrue interest
- When a TDR may be returned to accrual status
- When a TDR is no longer impaired
- Under what circumstances an impaired loan should be placed on nonaccrual

Survey respondents indicate a wide range of practices, as shown below:

Table 20–Practices Relative to TDRs, Nonaccural Status, and Impairment



Consistent with GAAP[4], most respondents (77 percent) consider TDRs to be impaired. In addition, a majority (66 percent) of respondents consider a loan that has been placed on nonaccrual status to be impaired.

3 OCC 2012-10, Troubled Debt Restructurings, April 5, 2012 Supervisory Guidance on Accounting and Reporting Requirements

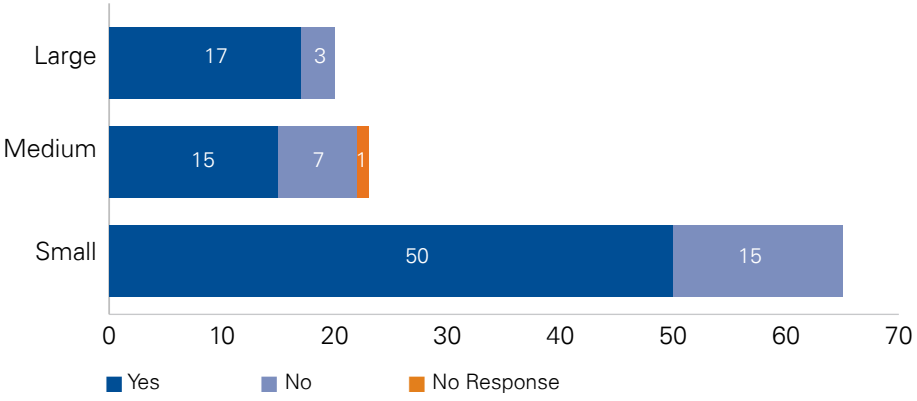
4 FASB Accounting Standards Update (ASU) 2011-02, Receivables (Topic 310): A Creditor's Determination of Whether a Restructuring Is a Troubled Debt Restructuring

Section 6
Model Validation and Backtesting

According to the 2011 interagency guidance[5], models must be validated periodically based on the risk and complexity of the model. Based on KPMG's experience, as the risk and complexity of a model increases, so should the frequency of the validation.

Based on the survey results, a majority of banks (76 percent) have performed an ALLL model validation in the last 12 months. Not surprisingly, this percentage rises to 85 percent for large banks as these banks typically have more complex methodologies that fall under these institutions' model validation requirements. While a significant number of small banks report completing a model validation as well, these validations are typically as the result of more ad hoc validation processes in response to feedback from regulatory or other stakeholders. As ALLL methodologies and processes continue to become more refined and complex over time, we would expect the number of institutions to have completed a validation to increase.

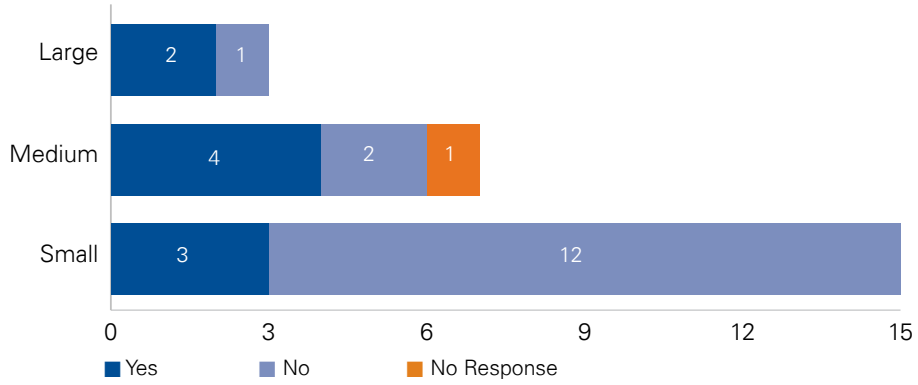
Table 21–Has a Model Validation Been Performed?



Of the 25 respondents that indicated they had not performed model validation activities in the last 12 months; the majority indicate they have no immediate future plans to perform model validation activities. This majority is highest among small banks, with 12 or 80 percent of small banks indicating no plans for conducting a model validation.

5 OCC 2011-12, Supervisory Guidance on Model Risk Management, April 4, 2011

Table 22–Is a Model Validation Planned in the Next 12 Months (Model Validation Not Performed in Past)?

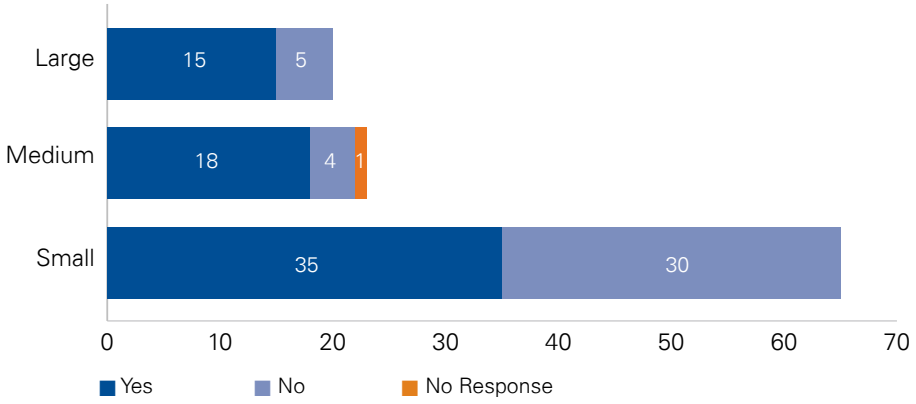


Having an independent review as part of the model validation process is important to help institutions manage the model risk around their ALLL process. One of the most important parts of validation is backtesting, as it is one of the primary methods for assessing the real-life performance of a model. The need for backtesting is discussed in detail in regulatory guidance, specifically the 2011 guidance on model validation referenced above. For the purposes of the ALLL, backtesting allows a bank to compare the ALLL at a point in time with the actual losses the bank experienced over the loss emergence period.

Based on the survey responses, most large (75 percent) and medium-sized banks (82 percent) periodically backtest their ALLL model(s), while only 35 out of the 65 small banks (55 percent) perform ALLL model backtesting. These results are lower than reported in the validation results above, suggesting that some institutions may not be conducting a full model validation, but rather selected components of a validation.

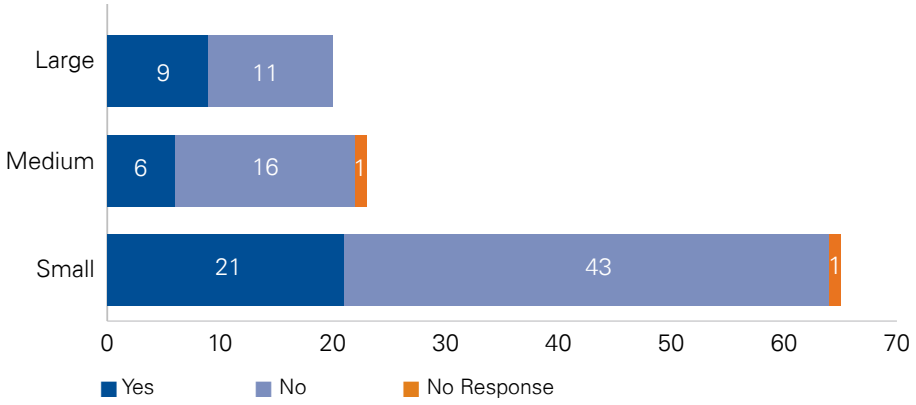
Backtesting the ALLL can be a challenging exercise in that many banks' estimates have an element of conservatism built into the process to account for uncertainty in the estimation process. As a result, KPMG has noticed that banks tend to identify an over-estimation bias when the ALLL backtesting results are reviewed across an economic cycle.

Table 23–Is the ALLL Backtested Periodically?



While backtesting typically refers to the overall ALLL, many banks also backtest their ASC 310-10/FAS 114 reserves specifically. The goal of this backtesting is to help banks understand if their original impairment analysis of these loans was an accurate predictor of the ultimate loss associated with those loans. The majority of banks responded no, although we note that almost 50 percent of large banks indicated that they do backtest their ASC 310-10/FAS 114 reserves.

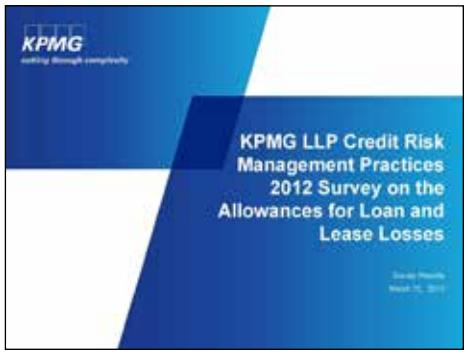
Table 24–Backtesting of ASC 310-10/FAS 114 Reserves



Conclusion

The ALLL remains a highly scrutinized area of a bank's financial statements. It is a key measure of financial health that is dependent on empirical analysis as well as management judgment. We hope that this survey provides insights into industry practices, including key framework elements, calculation of ALLL parameters, the use of qualitative and unallocated reserves, and model validation and backtesting. KPMG believes that scrutiny from regulators and other stakeholders will only increase over the next several years so it will remain critical for senior executives and credit risk professionals to continue to be focused on enhancing and supporting their ALLL processes.

The entire survey in presentation form is accessible below.



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About KPMG's Credit Risk Practice

KPMG's Credit Risk professionals provide clients with a full range of credit risk management and operational improvement services. We assist organizations with the alignment of their credit risk methodologies, processes, and tools with leading risk practices. We also advise clients on the development and validation of credit risk measurement models, methodologies,w and documentation as well as assist clients in achieving alignment of credit risk management practices with regulatory guidance.

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