Migration Analysis

Generally, problem assets will either deteriorate or improve over time. If a classified asset is not paid off or upgraded, it often deteriorates to a worse classification. If corrective action is not successful, a loss ultimately occurs. Migration (to loss) analysis uses association-specific data to track the movement of assets through the various asset classifications to Loss in order to estimate the percentage of losses that are likely to be incurred from the various categories and classifications of assets currently in the association's portfolio.

To be meaningful, the time period used for the analysis should be at least four quarters.

The steps to perform a migration analysis are as follows:

1. Stratify the portfolio into asset type and risk categories.

   The following stratifications may be useful:

   - Doubtful assets (or portions);
   - Substandard assets (or portions);
   - Special Mention assets;
   - Pass assets reviewed; and
   - Unreviewed and other assets stratified by risk or type.

   The Doubtful, Substandard, Special Mention, Pass, and unreviewed asset subcategories can be further stratified into categories such as commercial real estate, commercial business-secured and unsecured, etc. This is very important because certain asset types have different loss histories, such as one- to four-family residential mortgages as opposed to commercial real estate loans.

   Assets should be assigned to the category where they appeared at the beginning of the period analyzed, regardless of how they were subsequently categorized during the review period. For example, an asset designated as Special Mention at the beginning of the period should be assigned to that category because the examiner needs to determine the percentage of Special Mention assets that became Loss during the period. Examiners should not include in this analysis any assets that did not exist at the beginning of the period under review.

2. Determine the net loss percentage for each category of assets selected in step (1) that occurred during the review period. The net loss percentage is calculated by dividing the amount of charge-offs and SVAs that occurred on assets in each category by the amount of the assets in the category at the beginning of the review period. For example, if an institution had $50 million in Special Mention assets at the beginning of the review period and, for these assets, there were $1 million in charge-offs or SVAs during the review period, the net Loss percentage would be 2% ($1 million/$50 million).

3. Review all factors that would affect a change in the historical net loss data and make adjustments to the percentage as necessary.

4. Multiply the respective adjusted net loss percentages by the current outstanding balance of the assets in each category to derive the total allocations for each category. The analysis should also consider losses and risks of loss from off-balance-sheet exposure.

   The period being analyzed should move forward each quarter and will change the percentage for each category each quarter.

Note: An ineffective problem-loan identification, classification, or charge-off system will materially distort historical net loss percentages and make migration analysis difficult to apply.

Below is an example of migration analysis performed for a savings association based on its net loss performance over a one-year review period.

Portfolio	(1) Begin. Bal. $	(2) Loss Amt. $	(3) Loss Pct. %	(4) Curnt. Assets $	(5) Est. ALLL Requirement $
1-4 First Mortgage					
-Fixed LTV < 90	300	.50	0.17	350	0.58
-Fixed LTV > 90	100	.25	0.25	150	0.38
-ARM LTV < 90	90	.32	0.36	150	0.53
-ARM LTV > 90	80	.50	0.63	100	0.63
-Construction	30	.90	3.00	20	0.60
MBS	60	.00	0.00	100	0.00
Consumer:					
-Auto	20	.30	1.50	30	0.45
-Credit cards	10	.40	4.00	15	0.60
Commercial:					
-Secured	15	.23	1.53	25	0.38
-Unsecured	5	.15	3.00	5	0.15
-Special Mention	10	.30	3.00	13	0.39
-Substandard	5	.90	18.00	9	1.62
-Doubtful	3	1.00	33.00	5	1.67
Totals	728	5.75	0.79	972	7.98 (6)

(All dollar amounts are in millions.)

(1) Balance of the portfolio at the beginning of the review period.
(2) Losses experienced (both charge-offs and SVAs) in the portfolio during the review period.
(3) Percentage loss in the portfolio during the review period (column 2 divided by column 1).
(4) Current balance of the portfolio.
(5) The loss expected over the next review period (usually 12 months) based on the current level of assets in the portfolio (column 3 x column 4).
(6) The total is the amount of ALLL that may be appropriate for the association to have for loans. The ALLL for off-balance-sheet items is then added to arrive at the total ALLL.