Examination Process – Asset Liability Management Review
October 30, 2002

Asset liability management (ALM) can be broadly defined as the continual rearrangement of both sides of the credit union's balance sheet in an attempt to maintain reasonable profitability, to minimize interest rate risk, and to provide adequate liquidity. All credit unions perform some sort of ALM analysis; however, the level of involvement and understanding of the officials and management, and the quality of their analysis decisions varies widely. When the officials declare a dividend or change interest rates on loans, they are engaging in ALM. These decisions can impact liquidity and profitability. ALM strategies and techniques vary depending on the credit union's capital structure, the products and services offered, the terms of loans and deposits, and the level of the official's and management's understanding. In a small credit union with basic services ALM can consist of:

- Awareness of the member's share and loan needs;
- Access to a line of credit for short-term liquidity needs;
- Relatively short-term investments;
- Ability to adjust dividends and loan rates to changes in the market; and
- Adequate earnings and capital.

Daily management is usually responsible for analyzing the ALM position. The examiner's role is to review the ALM process and identify weaknesses or problems that could have a negative impact on the credit union's financial position.

Objective of the ALM Review – The objective of the ALM review during the examination is to:

- Determine the credit union has sufficient liquidity to handle normal savings and loan needs and that management is aware of any cyclical changes that can effect liquidity;
- Analyze management's approach to ALM and determine that interest rate risk is minimal; and
- Ascertain the ability of the ALM process to adapt to significant changes in the market.

Scope of the ALM Review – The scope of the ALM review will vary widely. Credit unions with a conservative, short-term maturity structure for savings, loans, and investments often only need a basic understanding of ALM. The review will be much more in-depth in larger credit unions that offer a wide array of products, services, fixed and variable interest rates and longer-term maturities on loans and savings.

If the examiners noted no major problems during the prior examination and no significant changes have occurred during the examination period, examiners will review the ALM program and the monitoring of liquidity to determine if all risks are adequately managed. Keeping the size and complexity of the credit union in mind, examiners should:

- Review the credit union's underlying assumptions used to develop their ALM analysis to determine if they are realistic and reasonable;
- Determine that credit union staff understands and adheres to its ALM program; and
- Assist management in developing corrective action plans, as needed.

While smaller and less complex credit unions may not have a formal ALM program, examiners should determine that credit union staff understands the mix of the balance sheet and its impact on the income statement.

If the credit union has had a key ALM personnel change or if ALM problems or potential problems exist, examiners will expand the analysis to a point where they are able to satisfy their concerns, and can develop reasonable, effective plans for corrective action.

ALM Policy – The ALM policy will vary depending on the sophistication of the credit union and the services and products offered. Credit unions that offer only basic products such as short-term consumer loans and regular savings may be able to address the very basic ALM considerations of sufficient daily liquidity and/or sources of short-term liquidity in the investment policy. Credit unions that offer more than the basic loan and savings products should have a written ALM policy that addresses the following, at a minimum:

- **Objectives** - that discuss the need to provide adequate liquidity and profitability while minimizing interest rate risk;
- **Responsibility –** who formulates and implements the policy, who analyzes the ALM position of the credit union and how frequently, what reports are used to provide the board with the ALM position, and who recommends changes to policy;
- **Monitoring –** this section documents how the credit union will monitor its ALM position, what reports will be reviewed, which ratios the credit union will calculate to analyze ALM, how often the ratios will be calculated and reported to the board, and the goals for each of the ratios;
- **Specific Guidelines –** the policy should define minimum goals such as:
    - The credit union will not allow a negative net interest spread for more than 3 consecutive months, or
    - Operational management will monitor and report to the board monthly the following 3 ratios - Core Deposit Ratio, Loan Term Assets to Total Assets, and Liquid Assets to Total Assets.

Qualitative Analysis – After reviewing the ALM policy, the examiner should begin with the ALM qualitative analysis. The focus should be on the credit union's exposure to interest rate changes, specifically on management's awareness, ability, and willingness to make adjustments to minimize the effect on profitability and capital. To perform the qualitative analysis, examiners should answer the following questions:

1. Has management developed an ALM plan and is the credit union following it?
2. Is it commensurate with the credit union's size and complexity?

3. Is the credit union measuring and monitoring its ALM position? Are the credit union's assumptions for this reporting mechanism reasonable and documented?
4. Does the present ALM structure pose material safety and soundness concerns?
5. Do the board and staff have sufficient training to understand ALM reports and their implications?
6. Is the board using the ALM report as a tool in the decision-making process or is the report "for the examiner" only?
7. Has management identified the core or stable member deposits that may be used to fund longer-term assets?
8. Has management documented the liquidity needs throughout the year to meet operating expenses, loan demand, and share withdrawal?
9. Are cash flow or potential liquidity problems indicated?
10. Has the board established reasonable targets for loan and investment portfolio diversification?
11. Does the credit union have a suitable mix of long and short-term assets in relation to its size, complexity, and share structure?

Quantitative Analysis – Quantitative analysis can assist in determining the level of exposure. Examiners should perform this analysis as a part of each exam. Ratios and trends are the focus of quantitative analysis. The following ratios are used to assist examiners in judging the ALM position of the credit union:

1. Net Loans / Total Assets – This ratio measures the percentage of total assets that are invested in the loan portfolio. Management should have established a maximum goal ratio to avoid a liquidity problem.
2. Core Deposit Ratio – This ratio is used to identify stable deposits that the credit union can rely on, regardless of seasonal swings, which can be used to fund longer-term assets. The more stable the funds, the easier it is to control liquidity and ALM. Therefore a high percentage is desirable and indicates a solid credit union.
3. Liquid Assets / Total Assets – This ratio measures the percentage of total assets that are invested in liquid assets. Liquid assets often pay no interest or have a lower yield because there is very little risk. Only enough funds to meet liquidity needs should be maintained in liquid assets.
4. Liquid Assets – Short-term Payables / Member Deposits – The adequacy of the credit union's liquid cash reserve to satisfy client savings withdrawal after paying all immediate obligations is measured by this ratio. The goal is to have just enough liquid funds to meet all member requests and operating expenses, with any excess funds invested in interest bearing accounts.
5. Loan Turnover Ratio – This ratio estimates how quickly the credit union will convert the loan portfolio to cash. The lower the result the faster the loan portfolio matures. ALM should be easier because the loan portfolio repayment is high, thus allowing management access to funds to provide for sufficient liquidity and funding of new loans and investments. The examiner can also analyze the changes to the ratio over various timeframes, this would provide an indication of the effect of recent decisions on the average term of the loan portfolio.

6. External Credit / Total Assets – This ratio measures the level of external credit. Examiners should ensure that the credit union is not dependent on external credit sources to fund normal daily operations and long-term needs; external credit should be used only to fund short-term liquidity shortfalls.
7. Net Interest Margin – This calculation starts with gross income and determines the amount available to cover operating expenses and contributions to capital after all interest and dividends on savings have been paid. Management should determine the minimum net interest margin that must be maintained in order to meet all operating expenses and capital contributions. Analyzing the net interest margin trend provides insight to the effect of management's past pricing decisions.

Information gathered while performing both the qualitative and quantitative analysis' should be placed in the workpapers and included in the regulatory agency's final report.

GAP Analysis – Gap analysis is a tool used by credit unions to analyze the match between rate sensitive assets (RSA) and rate sensitive liabilities (RSL). If RSAs and RSLs are evenly matched the effects of interest rate changes will be minimized while profitability is maximized. RSAs and RSLs are those assets and liabilities that mature or can be priced either upward or downward in the short-term. RSAs are loans or investments with yields that respond to changing short-term interest rates. The change may be contractual in nature such as a variable rate loan and/or due to maturity of the asset. RSLs have terms that respond to changing short-term interest rates such as certificates of deposit or money market accounts.

Gap analysis is performed on a spreadsheet. The assets and liabilities are assigned to time periods (0-1 month, 1-2 month, etc) based on their maturities. This is relatively simple for components such as investments and certificates of deposit in which the total amount matures on a specific date. But more complex if the RSA or RSL does not have a stated maturity such as a savings account or the total outstanding balance of the RSA or RSL does not mature all at once, but over a specified time period such as member loans.

Gap analysis also considers the repricing opportunities of the assets and liabilities, when all or part of the assets and liabilities will be available for reinvesting at the prevailing interest rates. The culmination of the analysis is the:

- **Gap** or the total of RSAs – RSLs for each time frame; and
- **Gap ratio**, which divides the above result, or gap by total assets. The gap ratio puts the gap in perspective to the credit union's size. A gap of $500,000 would not be material for a credit union with $10 million in assets, but it would be for a credit union with $2 million in assets.

The gap and gap ratio results can be positive, negative, or zero. A credit union with a positive gap assumes a more asset sensitive position (RSAs reprice quicker than RSLs). With a negative gap, RSLs are repricing more quickly than RSAs within the time period. A gap of zero indicates that the RSAs and RSLs for the time period are evenly matched.

While gap analysis provides an important tool for judging RSAs as compared to RSLs, it has limitations:

- The gap ratio assumes that all rate sensitive accounts reprice equally;
- It is not useful in determining how RSAs and RSLs should be positioned with regards to maturity to maximize profitability.
- It is similar to a balance sheet as it is only a snapshot in time, it does not measure the effect of multiple interest rate changes over time; and
- It relies heavily on the assumptions that were used to create the report, if the assumptions are incorrect, then the information is useless.

The examiner's responsibility when reviewing a credit union's gap analysis is to determine:

- The soundness of the assumptions used by management to draft the gap analysis report;
- That the gap and the gap ratio are within an acceptable range given current earnings and the credit union's capital position; and
- That management uses the gap analysis in conjunction with the items discussed under the qualitative and quantitative analysis sections to make decisions.

To assess the quality of the gap analysis and the management's overall understanding of the concepts, examiners should provide answers to the following questions and document the results and any additional comments in the workpapers:

1. Does management have a good understanding of the gap analysis along with the benefits and limitations of the analysis?
2. Are the assumptions used to draft the analysis reasonable, specific to the credit union and documented in writing?
3. Are the credit union's earnings and capital positions strong enough to withstand the risk exposure revealed in the gap analysis?
4. Could the asset and liabilities structure be changed should it be necessary to diminish the risk exposure?
5. Does management and the officials consider the results of the gap analysis prior to making decisions that will effect it, such as changing loan and savings interest rates or offering a new longer-term loan product?

Signs of Warning – These signs or indicators are ratios, numbers, trends, or suspicious activity that may indicate existing or potential problems. During the review of asset liability management, the examiner should look for the following signs of warning:

- Significant mismatch of the asset/liability maturities;
- Borrowing funds for normal business operations;
- Lack of adequate ALM policy considering the sophistication of the credit union;
- Officials that are reluctant to lower savings rates or increase loan rates;
- ALM analysis that is not used as a management tool, but rather is performed for the examiner only;
- High level of long-term assets to total assets;
- Declining net interest margin;
- Increasing loan turnover ratio;

- Rapid savings growth and/or above market interest rates on savings;
- Constant liquidity problems; and
- Lack of diversification of loans and savings types.

ALM Deficiencies – Problems that cannot be resolved during the exam, and are not material, should be noted in the final report in the "Examiner Findings". This document lists operating exceptions, violations of law or regulation, unsafe and unsound policies, practices, and procedures. Relatively minor or infrequent infractions should not be discussed within this document; they distract from the more important matters. Immaterial issues should be discussed orally with the manager or appropriate employee.

When identifying a finding, the examiner should include a precise description of the problem or violation, who is responsible for correcting the problem, the specific section of the Law, bylaws, rules and regulations, or other authority which the finding violates. In the event that the credit union violates more than one of the aforementioned, the examiner should cite the highest authority. Examiners should also include on this document exceptions that were noted at previous exams that have yet to be corrected. These findings should be cited under a heading of a similar nature. Issues and problems of a material nature should be addressed in the Document of Resolution.

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