

HOW TO USE THIS MANUAL

The reassessment of risk in these turbulent times has brought about the issues of safety of principal and liquidity as priorities over return. Even experienced financial managers grapple with the intricacies of asset and liability management (ALM). ALM is simple in concept. It is the active management of a financial institution's assets (primarily loans and investments) and liabilities (mainly deposits) to ensure that they produce the planned level of net interest margin over all economic cycles. The primary operating objective for ALM is to maximize both profitability and capital, and always have enough cash available (liquidity) to meet current needs, without exposing the bottom line to the risk of substantial losses.

Think of ALM as a “just in time” inventory management system that strives to avoid leaving cash from deposits sitting on a shelf in the vault. If the cash is lent to borrowers or invested in securities, the financial institution is earning money. Unlike inventory management, however, ALM is not an exact science. Financial institution managers and directors are used to dealing with exact financial statistics that paint a clear picture. ALM requires a change in thought processes. We have to deal with uncertainty.

Financial statistics show exactly where you have been. ALM provides a map of where you are going, and there are multiple routes and lots of uncertainty. That is what makes it a hard concept to grasp.

Chapter 1 Why You Need ALM

In Chapter 1 we discuss three reasons why you need an asset and liability management program in your financial institution:

- *To meet regulatory requirements.* The role of the federal and state banking regulators is to enforce rules and regulations through periodic examinations. These examinations focus on regulatory compliance, risk management, asset and liability management, strategic planning, and numerous other safety and soundness issues that factor into the CAMELS rating system.
- *To manage profits.* Overall, a safe, sound, and profitable banking system is necessary to support the U.S. economy. It is this critical role that we use as a platform to discuss asset and liability management (ALM). In the day-to-day operations of a financial institution, ALM may seem transparent. So it is important to understand the role ALM plays in your institution and how your institution integrates with the economic system in this country.
- *To evaluate interest rate exposures.* As part of your profit management program and to meet regulatory requirements, you will need to assess your interest rate risk exposures under several interest rate scenarios.

These reasons are the foundation for developing an ALM program tailored to suit your financial institution's needs. This foundation can also be used to support ALM policy discussions with the Board of Directors.

Chapter 1A Staffing for the ALM Function

The right staffing in your Assets Liability Management team optimizes the positioning of your financial institution. To find the best match for your institution, this chapter offers sample position descriptions and

qualifications for potential positions, including Senior Risk Management Officer, Financial Risk Manager, ALM Manager, and Senior Asset/Liability Analyst.

Chapter 1B Establishing an Enterprise Risk Management Approach to ALM

Today's environment requires a much more integrated approach to managing portfolio risks than in the past. Risks handled independently create a fragmented approach, which does not recognize the interdependence of the types of risk. This chapter addresses an integrated approach as a better solution to managing risks.

Chapter 1C Selecting ALM Software and Services

A solid ALM software package is essential in carrying out ALM responsibilities. Considerations for making the selection include gathering information about the software, the vendor, their services, and your specific demands that the software needs to meet.

Chapter 1D Managing ALCO According to the Institution's Strategic Plan

When interest rate risk plans are discussed in the asset and liability management committee (ALCO), the plans must be coordinated with the institution's strategic plans. In particular, the strategic plans should be developed with input from the ALCO, and ALCO representatives should participate in the development of plan assumptions, especially those that impact the institution's balance sheet mix.

To assist in the coordination of the strategic planning process with ALCO, this chapter discusses:

- The essential elements of a successful strategic planning process,
- Methods for using benchmarking to add value to an institution, and
- Using cross-functional teams to implement process reengineering, where necessary, to achieve organizational goals.

Chapter 1E Coordinating the Analysis of Potential Acquisitions with ALCO

Analyzing a potential acquisition involves both financial and nonfinancial factors and must include a perspective on both risks and profits. The institution's asset and liability management committee (ALCO) should be involved with the acquisition analysis process to ensure that the combined institutions will have a risk profile that is consistent with ALCO policies, both immediately after the acquisition and during the short- and long-term planning horizon. ALCO should be responsible for evaluating the impact of the combination on interest rate risk as well as the integration of interest rate risk with other enterprise risks, including credit and operational risks. This chapter discusses the process of developing the analysis of a potential acquisition to assist the ALCO with their risk evaluation of the combined entities.

Chapter 2 Developing an Effective Interest Rate Risk Management Program

In this chapter, we take you through the key steps involved in implementing an interest rate risk (IRR) management program. At each step along the way, we explore options and make recommendations to help you develop your own comprehensive IRR program:

Step 1: Create an Asset and Liability Management Committee

Step 2: Establish IRR Policy Limits

Step 3: Select an IRR Measurement System

Step 4: Develop an IRR Policy Statement

Step 5: Implement, Monitor, and Audit

Chapter 3 How To Identify, Measure, Monitor, and Control Interest Rate Risks

Financial statements show you where your financial institution is on a specific day (the balance sheet) and where the institution came from (the income statement); they do not help you to “see” interest rate risk. Therefore, you need to know where to look for risk and how to identify it when you see it. Of course, you may need to make some assumptions to know whether what you see is risk or a profit opportunity.

In this chapter, we build on the IRR management program developed in Chapter 2 to help you determine how to identify, measure, monitor, and control interest rate risk.

Chapter 3A Sources for Interest Rate Forecasts

As a supplement to Chapter 3, this chapter provides sources for developing interest rate forecasts that are used in IRR simulations. These sources include:

- The Financial Forecast Center
- Blue Chip Financial Forecasts and Blue Chip Economic Indicators

Chapter 3B Documenting and Supporting Prepayment Assumptions

Chapter 3B also supplements Chapter 3 with methods to use in developing loan prepayment assumptions. Use this information to document your ALM model assumptions for examiners.

Chapter 3C Non-Maturity Deposit Modeling

In Chapter 3C, we discuss non-maturity deposits such as savings accounts and MMDA accounts. Even though these deposits have no stated maturity, they do include customers who are rate sensitive. These customers will withdraw their funds if they find a better rate deal. Making modeling assumptions about the rate sensitivity of these deposits is necessary for use in ALM model simulations. We cover this area from the regulatory perspective as well.

Chapter 3D Understanding and Validating Interest Rate Risk Models

This supplement to Chapter 3 discusses the following five types of interest rate risk models:

- Gap Reports
- IRR Simulation Models
- Economic Value Sensitivity and Duration Models
- Monte Carlo Simulation

- Building or Acquiring Interest Rate Risk Models

Use this material to evaluate the strengths and weaknesses of the models and to decide which models are appropriate for your ALM program.

Chapter 3E Improving Risk Adjusted Return on Capital

In this chapter, we discuss the Risk Adjusted Return on Capital (RAROC) and Value-at-Risk (VaR) methods that are used for improving ROE while considering all risks.

Chapter 3F A/L Risk Management and Investment Policies

The sample A/L risk management and investment policies can be customized to meet the specific needs of your financial institution.

Chapter 3G Allocating Capital for Interest Rate Risk and Market Risk

Chapter 4 Deposit Pricing Strategies

Deposit pricing strategies are the backbone of your asset and liability management and interest rate risk management program. This chapter covers important methods for pricing deposits in varying interest rate environments to achieve your risk management goals.

Although there is no one best approach to deposit pricing, this chapter should help you, your management team, and your board fine-tune your deposit pricing strategies with the objective of meeting deposit growth goals while controlling costs and interest rate risk.

In this chapter, we discuss deposit pricing fundamentals, tactics, techniques, and changes to your pricing and ALCO process to help you make successful deposit pricing decisions.

Chapter 4A Controlling Deposit Interest Expense in a Rising Rate Environment

This chapter outlines a method for identifying repricing behavior, allowing ALM managers to more effectively control interest expense in a rising rate environment.

Chapter 5 Liquidity Management and Funding Alternatives

Traditionally, institutions have relied heavily on core deposits to fund their operations. But as loan demand outpaces the growth in funds that depositors leave with institutions, institutions need to find new ways to do business, to attract depositors, to tap non-traditional funding sources, and to consider their balance sheet. At the same time, community-based financial institutions will face associated risks, regulatory issues, and management challenges.

To meet these challenges, financial institutions have developed innovative ways to meet customers' needs, while at the same time managing both interest rate and liquidity risks. This is being done primarily through liquidity management and the use of alternative funding mechanisms.

Chapter 6 Managing Investment Portfolio Risks in a Low Rate Environment

One of the key requirements of prudent management is to conduct a risk review of securities to become informed about the potential for increases in credit, interest rate, and liquidity risks. This chapter provides guidance on issues to consider in this risk review process. In addition, the chapter focuses on the credit analysis of municipal bonds that could become a risk issue as many states experience significant budget shortfalls.

Chapter 6A Investing in Mortgage-Backed Securities

This chapter discusses some of the more popular Mortgage-Backed Securities (MBSs) and how they function to assist you in the investment management process as part of your ALM program.

Chapter 6B Settling Security Transactions

Investment portfolio security transactions are a key part of the ALM process for many financial institutions. Portfolio securities provide liquidity and yield management opportunities for ALM managers that are generally easy to implement. However, investment transactions can also result in lost or foregone opportunities if the settlement process does not go as expected. Therefore, ALM managers working with investment portfolio managers should be aware of the intricacies of the securities settlement process to eliminate potential problems when possible. This chapter discusses the securities settlement process.

Chapter 6C Macro Hedging of Interest Rate Risk

Hedging is the use of financial instruments, typically derivatives, to mitigate financial risks of another financial instrument. Macro hedging is a technique whereby financial instruments with similar risks are grouped together and the risks of the grouping or portfolio are hedged together. Often this is done on a net basis, with assets and liabilities included in the one portfolio. For example, instead of using interest rate swaps to hedge interest rate exposure on a loan-by-loan basis, financial institutions hedge the risk of their entire loan book or specific portions of the loan book. This chapter discusses five steps to creating a macro hedge.

Chapter 6D Hedging with Interest Rate Swaps

Interest rate swaps can be used in an asset and liability management program to transfer fixed for floating payments or the reverse, depending on the degree of interest rate risk planned. In addition, swaps can be used to accommodate commercial customers who are hedging their assets and liabilities. This chapter describes the types of swaps available and the accounting and valuations requirements required to maintain these instruments.

Chapter 6E Using Credit Derivatives to Manage Risk

A derivative is essentially a contract that “derives” from an original contract or asset. For example, stock market derivatives are contracts that are settled based on movements in prices of stocks, without transferring the underlying stock. Similarly, a credit derivative is a contract between parties related to the returns from a “credit asset,” without transferring the asset. This chapter discusses credit derivatives and their use in the asset and liability management process.

Chapter 6F Hedging Issues and Strategies

Hedging is an important component of asset and liability management and hedging strategies can have significant implications for financial institutions. This chapter focuses on issues and related strategies that should be considered before committing to a specific hedging program.

Chapter 6G Techniques for Managing Liquidity Risk in the ALM Process

After the record housing sales experienced in the U.S. during the 2001 to 2005 time period, there is an unprecedented adverse impact on the ability of large commercial and investment banks to stay liquid as a large number of homes have fallen into foreclosure. This chapter focuses on various techniques for addressing liquidity risk in the ALM process.

Chapter 7 Investment Policy

A Sample Investment Policy is presented in a form that can be adapted, expanded, and otherwise edited to suit the needs of specific financial institutions.

Chapter 8 Using Loan Participations in Your ALM Program

Financial institutions can use loan participations as an asset and liability management (ALM) tool to boost loan yield. Although loan participations are not a new topic for financial institutions, they are typically not included in ALM discussions. However, because loan participations are not investments, they are not subject to FAS 115 and other ALM mark-to-market issues. This chapter discusses how to initiate a program to use loan participations as an ALM tool to boost yields, add liquidity, and diversify risks.

Chapter 8A Hedging Default Risk

Default risk is typically accounted for in the institution's allowance for loan and lease losses. However, there are some loan product risks that ALM managers may also be able to incorporate into hedging strategies. The recent growth of non-traditional mortgage products is an area that has become a concern for regulators, particularly as short term rates increase. This chapter discusses non-traditional mortgage default risk and provides some hedging strategies to mitigate this risk.

Chapter 9 ALM Case Studies and Strategies

This chapter includes eight case studies that illustrate how various asset and liability management strategies can be applied to solve financial problems arising from loan and deposit growth issues and unexpected interest rate changes. Each case study is designed to illustrate a different point with the common thread that no changes can be made that would cause interest rate risk to threaten the safety and soundness of the financial institution.

Chapter 10 IRR Audit Checklists

An audit has three components: a set of audit objectives; a review of the adequacy of existing internal controls; and a detailed audit of the interest rate risk management process. In this chapter, we have incorporated these components from the programs that the regulators use to check on each institution's interest rate risk management efforts. The idea is that if your institution develops an interest rate risk management

program that can pass a regulatory examination, it should also meet the needs of the board and senior management.

Chapter 11 Liquidity Management Audit Checklists

This chapter provides a three-step process to use in auditing your liquidity management program. This process includes the following steps:

Step 1 — Review Regulatory Management Issues

Step 2 — Conduct a Review of Liquidity Risk Controls

Step 3 — Assess Liquidity Risk Inherent in Your Products and Services

The three steps lead to a sample checklist, which can be used as to develop checklists specific to your institution.

Chapter 12 ALM Ratios, Statistics, and Glossary