A Plain English Guide to Asset/Liability Management for Community Credit Unions
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>How this Booklet is Organized:</td>
<td>1</td>
</tr>
<tr>
<td>Chapters and Appendices:</td>
<td>2</td>
</tr>
<tr>
<td>Chapter 1: An “Executive Summary” of ALM</td>
<td>4</td>
</tr>
<tr>
<td>Why do I need ALM?</td>
<td>4</td>
</tr>
<tr>
<td>What else do I need?</td>
<td>5</td>
</tr>
<tr>
<td>Chapter 2: The Credit Union Financial Management Process</td>
<td>6</td>
</tr>
<tr>
<td>Chapter 3: What is Asset/Liability Management?</td>
<td>9</td>
</tr>
<tr>
<td>Overview</td>
<td>9</td>
</tr>
<tr>
<td>Definition of Asset/Liability Management:</td>
<td>9</td>
</tr>
<tr>
<td>How ALM fits into the Financial Management Process – the “Top Three”</td>
<td>10</td>
</tr>
<tr>
<td>Why does the Credit Union need ALM?</td>
<td>12</td>
</tr>
<tr>
<td>A practical example of ALM at work</td>
<td>13</td>
</tr>
<tr>
<td>Another example of ALM at work</td>
<td>14</td>
</tr>
<tr>
<td>Chapter 4: The ALM Process – the Basics</td>
<td>16</td>
</tr>
<tr>
<td>The Basic ALM Process at a Glance</td>
<td>16</td>
</tr>
<tr>
<td>ALM Process Checklist</td>
<td>18</td>
</tr>
<tr>
<td>Chapter 5: Goals and Returns to the Credit Union</td>
<td>20</td>
</tr>
<tr>
<td>Coming up with Goals for the Credit Union</td>
<td>20</td>
</tr>
<tr>
<td>Purpose of Goal Setting</td>
<td>21</td>
</tr>
<tr>
<td>Goal Setting and its Impact on ALM</td>
<td>21</td>
</tr>
<tr>
<td>Financial Targets versus ALM Policy Limits</td>
<td>23</td>
</tr>
<tr>
<td>Chapter 6: Risks</td>
<td>25</td>
</tr>
<tr>
<td>Defining Risks</td>
<td>25</td>
</tr>
<tr>
<td>How the Four Main Risks are Interrelated</td>
<td>27</td>
</tr>
<tr>
<td>How does a Credit Union Calculate Risk?</td>
<td>27</td>
</tr>
<tr>
<td>How Goal Setting, ALM Risk Measures, and Strategies work together</td>
<td>28</td>
</tr>
<tr>
<td>The Credit Union’s Balance Sheet Insurance: Capital</td>
<td>29</td>
</tr>
<tr>
<td>Chapter 7: Measurement and Management – the Basics</td>
<td>33</td>
</tr>
<tr>
<td>ALM Measurements – the Basics</td>
<td>34</td>
</tr>
<tr>
<td>Time is your Guide</td>
<td>37</td>
</tr>
<tr>
<td>How to use ALM Measurements – start of the Management of ALM</td>
<td>38</td>
</tr>
<tr>
<td>ALM Reporting</td>
<td>39</td>
</tr>
</tbody>
</table>
Contents - continued

ALM Strategies ____________________________________________________________ 39
Chapter 8: The Asset/Liability Policy ___________________________________________ 40
Definition of ALM as it relates to the Asset Liability Policy ________________________ 40
Who is Responsible? ________________________________________________________ 40
What Should Be In the ALM Policy? ____________________________________________ 40
How Often You Should Revise The Policy ______________________________________ 42
Chapter 9: Roles of the Board of Directors and the Asset/Liability Committee ______ 43
Meeting the Credit Union’s Goals _____________________________________________ 43
Frequency of Meetings ______________________________________________________ 44
Sample Agenda __________________________________________________________________ 45
Red Flags ______________________________________________________________________ 46
Action Plans and ALM Strategies _______________________________________________ 46
The Role of the Board of Directors _____________________________________________ 47
Chapter 10: A Practical Example of ALM Measurement and Management __________ 48
Measurement and Management – Step by Step _____________________________________ 48
Start with Goals __________________________________________________________________ 48
Policy and Measurement System _______________________________________________ 49
Strategies to Keep the Credit Union on Track ______________________________________ 50
Make Decisions and Execute Actions ____________________________________________ 50
Conclusions ____________________________________________________________________ 51
Chapter 11: Conclusions ______________________________________________________ 52
ALM is constantly changing ____________________________________________________ 52
Integrate ALM into Part of the Credit Union’s Financial Management Process ______ 52
Keep the ALM Process Evolving – Have Fun at ALM! ____________________________ 52
Goal Setting ____________________________________________________________________ 53
Balanced Scorecard __________________________________________________________________ 53
Strategies ______________________________________________________________________ 54
Fiscal Year Plan (Alignment of Short Term Goals and Strategies) ___________________ 55
Periodic Measurement/Reporting Mechanism _______________________________________ 56
Remember - It is the members and shareholders’ money! ___________________________ 56
Kevin Haffner is Group President of ProfitStars, a subsidiary of Jack Henry and Associates, Inc. ProfitStars is a leading provider of best-of-breed products and services designed to improve the operating performance of diverse corporate entities and financial institutions of all asset sizes and charters.

Kevin leads ProfitStars’ Omaha, Nebraska operations in the areas of research and development, training and consulting, implementation, and customer support. Having more than 20 years of experience in the industry, he maintains a solid accounting and finance background as it relates to financial institutions’ specific needs with everyday planning and decision-making processes.

Kevin has established an industry presence as a featured speaker at a number of National ALM conferences and seminars and as author of numerous articles for publications such as CU Times, CU Journal, CNN Money, CU Magazine, and CU Executive Journal. In addition, Kevin facilitated several hands-on workshops in the areas of ALM/budgeting, strategic planning, product costing and cash flow forecasting for various trade associations.

Prior to joining ProfitStars, Kevin worked for nine years with CUNA Mutual Group as manager of Financial Management Services where his primary responsibilities were managing marketing, education and consulting activities along with personally consulting credit union executives on financial topics.

Kevin holds bachelor’s degrees in accounting and finance from Linfield College in McMinnville, Oregon.
How this Booklet is Organized

Finally, a “Plain English Guide” to Asset/Liability Management!

This booklet will introduce you to the subject of Asset/Liability Management (ALM). It is designed to be simple, informative, and hopefully a bit entertaining. Above all, it is written in plain English. This guide gives many accounts, both of successes and failures in the subject. In the end, suggesting several primary goals for you:

1. Learn the basics of ALM to better help run the Credit Union.
2. Use ALM to become more profitable and reach the Credit Union’s goals.
3. Better serve the Credit Union’s members.

There are only a few requirements before you begin:

- You have approximately 90 minutes to read this booklet;
- You understand the basics of Credit Union accounting (i.e. you know what a Credit Union balance sheet and income statement looks like).
- You have a general idea of what some of the more important Credit Union CAMELS ratios are, such as Net Interest Margin, Return on Assets (ROA), Return on Equity (ROE), and Capital to Assets, and how they are calculated.
- You have no “preconceived notions” of what ALM is.
**Chapters and Appendices**
The booklet is divided into 11 chapters and handy appendices containing supplemental materials. Although each chapter has a specific topic, they are meant to be read in sequence. All chapters build upon the knowledge in the previous chapters. It is written for Credit Unions whose assets are less than $10 billion. Very large Credit Unions, savings institutions, and credit unions have more complex ALM issues than those faced by smaller institutions, which will not be addressed in this booklet.

**Who Should Read the Booklet?**
- ALCO members
- Board of Directors of the Credit Union
- Non-financial managers of the Credit Union
- Credit Union employees involved with the financial function
- Credit Union examiners/regulators
- Consultants, accountants, and vendors in the Credit Unioning industry

**This Booklet is Intended to Cover the Basics of ALM, And Explains:**
- What is ALM and why ALM is important.
- Discusses the ALM process and how it is integrated with Long Range Planning and the Budgeting Process.
- The balancing act between goals, risks and rewards, and strategies the Credit Union employs.
- Looks at the role of the ALCO and board of directors in the ALM process.
- What are the key points to the ALM policy?

**Appendices and Samples to Help You With the Concepts Learned**

**Appendix A** shows a sample Asset/Liability Policy, and a sample of minimum/maximum values of ALM policy limits.

**Appendix B** gives a recap of the various ALM measurement techniques, what they are for, and how they are computed.

**Appendix C** shows sample ALM reports for less complex Credit Unions.

**Appendix D** gives a recap of the pros and cons of different ALM services.

**Appendix E** is a Glossary of Key Terms.
The Basics of Asset/Liability Management
Chapter 1: An “Executive Summary” of ALM

Key Points in this Chapter:
- If you’re reading this chapter, it must mean you want to “cut to the chase.” It also serves as a great general introduction to the concepts presented later in the book.
- Asset/Liability Management is the: Process of Evaluating and Executing Actions to Control the Credit Union’s Risks and Reach its Financial Goals.

Asset/Liability Management is a critical part of the Credit Union Financial Management Process. Credit Unions that employ ALM effectively tend to be higher performing and serve their members better than Credit Unions that view ALM as a “necessary evil.” ALM alone will not guarantee that you will be a higher performing Credit Union, but it does greatly increase the Credit Union’s chances of success. Therefore, if you want to have the potential of being a higher performing Credit Union, you must take ALM seriously.

Why do I need ALM?
To be blunt – because the assets and liabilities of the Credit Union are the member’s property. The management and the board of directors of the Credit Union are simply “safekeeping” the accounts for the members. Since a top goal of all Credit Unions is to promote safety and soundness for its member base, ALM helps to insure that goal is being met.

The average annual growth rate in total assets of the Credit Union industry has grown above 7% since 1992. Total Deposits and total member base have also increased. However, the number of Credit Unions in the U.S. has declined steadily since 1990. Since total assets have increased and total Credit Unions have decreased, individual Credit Unions have grown at a much faster pace. Figure 1.1 illustrates these points.

![Figure 1.1 Number of U.S. Credit Unions and U.S. Total Assets of Credit Unions](image.png)
Who is in Charge of ALM?
In a broad sense, everyone at the Credit Union. Sooner or later, all actions taken at the Credit Union (whether it is making loans, member service activities, or building a branch) are ALM activities. They all affect the Balance Sheet (Assets, Liabilities, and Capital), and the Income Statement. More specifically, the Board of Directors is ultimately responsible for guidance on the risk/return levels expected at the Credit Union. The Asset/Liability Committee (ALCO), usually composed of senior level Credit Union management, is in charge of the day-to-day ALM activities. The ALCO reports ALM results to the Board of Directors on a periodic basis, usually once a month, or once a quarter.

What Else Do I Need?

1. Clear Goals. Goal setting is part of the Credit Union’s Long Range Strategic Planning Process. If the Credit Union’s goals and objectives are clear, understood, and perceived to be achievable by the ALCO and the Credit Union’s employees, chances are ALM will be much easier. In order for goals to be clear, they must be measurable, have a time dimension, and be reasonable.

2. Knowledge about the ALM Process. Most ALCO members should know ALM very well. The board of directors should have a good, general understanding. (This booklet can help!) If not, further education is required. In addition, ALM is a subject that constantly evolves. Thus, it is expected that the knowledge level of the Credit Union personnel responsible for ALM evolves as well. Ongoing education is a must. It is also important to note that ALM is a process. This involves much more than reporting or having an ALM policy alone.

3. An Asset/Liability Management Policy. This outlines the acceptable risk/return levels of the Credit Union, duties of the ALCO and the board of directors, and general procedures for ALM. It is suggested to keep the policy simple, yet provide clear guidance to the Credit Union.

4. A mechanism to measure risk/returns of ALM. Most often, this is a commercially available ALM model or service bureau (outsourced solution). The mechanism must be periodically validated to make sure the assumptions, input/output, and calculations are correct. Many times this can be done by the vendor providing the model or service bureau – as long as the people performing the validation are independent of the actual software coders/designers. Be aware, there are many measures available for risk/returns and ALM. Like most things, they have their pros and cons, so pick the measures that make sense. Beware of ALM models derived off the Credit Union Call Report or ones that do historical to present reporting only. They may not give you the necessary, detailed information in order to make proper decisions.

5. A Consistent Management of the Process. ALM is NOT a measure-and-forget exercise. Constant, consistent, management of the process is a must. The ALCO is the group within the Credit Union that coordinates the ALM process. From time to time, they report a summary of the ALM results and decisions to the board of directors.

6. A Great Attitude. It is our belief that if your Credit Union views ALM as a “necessary evil” or performing ALM is done solely to appease the examiners, then the Credit Union’s chances for success will greatly decrease. Nothing beats a great attitude when dealing with this subject.

7. Be aware of differences between ALM as viewed by the Examiners and ALM as viewed by the Credit Union. The examiners have a slightly different view of ALM than the day-to-day business of managing the ALM process. Both views are “correct”, but they each have different intents.

8. Consider ALM as one step in the Financial Management Process. ALM is only part of the Credit Union’s coordinated Financial Management Process. Other areas, such as Long Range Strategic Planning and the Budgeting Process, need to be added in order for ALM to be successful. It is the integration of these processes that help insure not only the safety and soundness of the Credit Union, but also that the short and long term goals of the Credit Union are being met.
Chapter 2: The Credit Union Financial Management Process

Key Points in this Chapter:
- There are several disciplines in the Credit Union Financial Management Process. Each is very important in its own right, and each needs to be integrated into the others. To work properly, they must be coordinated.
- Since Credit Unions constantly change, the adoption of the Financial Management Process in the Credit Union must also change.
- There is empirical evidence which shows effective planning and high performance are highly correlated.

The Credit Union Financial Management Process
Let’s assume the Credit Union has looked ahead into the future and determined that one of its long-term goals is to be the best Credit Union in the area. (Notice the word ‘best’ which may or may not be the most profitable.) The Credit Union then decides on the types of products and services it wishes to offer to the members. It also determines how the delivery channels will be (ATM, drive up, internet, brick and mortar branches, etc.) to reach its members. The Credit Union sets rates, hires and trains people, invests in technology, advertises, etc. Sounds like normal Credit Union practices, right?

Keeping track of this process, and seeing the eventual financial impact on the Credit Union, is called the Credit Union Financial Management Process. When you think about it, almost everything the Credit Union does will eventually translate into the financial statements (Balance Sheet and Income Statement) of the Credit Union. This goes from making a decision to make a larger portion of the Credit Union’s assets in auto loans, to what rate the Credit Union offers on a “CD special”, to how a teller treats a member. Sooner or later, it will affect the financial statements of the Credit Union – all with various degrees.

Figure 2.1 is an illustration of the Credit Union Financial Management Process. It starts with a top level, strategic look with Long-Range Strategic Planning, and eventually is concerned about the profitability of the Credit Union’s individual and total member base. By the time you are analyzing member profitability, the Credit Union is making very tactical decisions about its operations. All throughout this process, feedback, measurement, management, and communication are critical to the Financial Management Process and its success.

Figure 2.1 The Credit Union Financial Management Process
Defining the Process
The entire Financial Management Process is interrelated, yet each step is concerned with a distinct purpose. Most Credit Unions should, at a minimum, perform the “top three” which are Long Range Planning, ALM, and the Budgeting Process. For larger Credit Unions, Organizational Profitability through Member Profitability is also usually added.

It would take several volumes to explain each of the financial management processes adequately. Since this booklet is concerned with ALM, a great deal of time will not be spent on the other subjects. What you need to know is a brief definition of each, as well as how each is related to ALM.

Long Range Planning is the process of defining the Credit Union’s goals and objectives and converting them into action plans. In other words, it answers a simple question: What does the Credit Union want to be in the future? This is a critical question to answer, since in many ways it sets the direction and philosophy of the Credit Union. In addition, since it deals with goals and objectives of the Credit Union, Long Range Planning sets the Asset/Liability Management expectations.

For example, if one of the long-term goals of the Credit Union is growth, and earnings are a secondary consideration, then the ALM approach employed by the Credit Union will be very different than if earnings were the primary concern.

Long Range Planning also specifies the Mission, Vision, and Core Values of the Credit Union. It answers such questions as:

- What is the Credit Union’s purpose?
- Why do we exist?
- What are the values we are trying to achieve in the long run and in day-to-day operations?
- Do we have a set of principles in which we are to conduct Credit Union business?
- How do we treat members, employees, and the community?

Long Range Planning is a critical component of the Financial Management Process, because it sets the tone for the other items – such as ALM – that follow. The specifics of Long Range Planning are beyond the scope of this booklet. However, one function in Long Range Planning - Goal Setting – is also a function of ALM. We will see in later chapters how Goal Setting helps to integrate Long Range Planning with the ALM process.

Asset/Liability Management is the process of evaluating and executing actions to control the Credit Union’s risks and reach its financial goals. If Long Range Planning is where the Credit Union wants to be in the future, ALM is concerned with how to get there. Much will be said of ALM in the remaining chapters.

The Budgeting Process is the fiscal year action plan, which can be compared to the Credit Union’s actual results in order to take corrective action. In essence, the budgeting process is a shorter-range (typically one-year) version of the Long Range Plan and Asset/Liability Management strategies. It is the “road map” for the year, and usually the Credit Union can get monthly detailed progress reports showing the original budget to the actual statements. Although the budget is traditionally financial, the budgeting process should include non-financial measures. There are many such examples, such as employee count, budgeted ATM volume, number of new members, etc.
**Organizational Profitability** is the process of measuring and managing the contribution of the Credit Union’s branch and department/responsibility center network. Organizational Profitability can answer such questions as:

- How profitable is the Credit Union’s branch network, and which branches are the most/least profitable?
- How are the branch managers performing compared to goals and objectives?
- Where should the Credit Union target growth in locations for its products and services?

**Product Profitability** is the process of measuring and managing the contribution of a product line. It can address many questions including:

- What is the profitability of each of the Credit Union’s products and what are their unit costs?
- How efficient is the Credit Union in delivering its products to the market?
- If the Credit Union changes the composition of products and services, as well as pricing, what are the new contributions of each product line?

**Member Profitability** is the process that enables an institution to identify how a member’s total Credit Union relationship contributes to the institution’s earnings goals. It is critical that the Credit Union performs Product Profitability BEFORE it analyzes Member Profitability. The reason is the Credit Union must get accurate product unit cost data (such as the true profit/cost of a money market checking account) before it applies that unit cost to a member. It then analyzes the member’s contribution. In addition, the Credit Union can group related members into “households” and analyze the contribution of the household to the Credit Union’s profitability. Although member profitability is a fascinating subject, competently performing Long Range Planning, ALM, and the Budgeting Process is the first step in becoming a high performance Credit Union.

As further evidence that the financial management process is important, in a recent study Credit Unions were divided into two groups: Tier 1 (the higher performing tier), and Tier 2 (the lower performing tier). The study sought to show a correlation of planning as an important, involved, and believable process to the performance of the Credit Union. As expected, the more the Credit Union involved their staff in the planning process, and the more the plan was seen as credible, the more the Credit Union tended to be in the higher performing tier.¹
Chapter 3: What is Asset/Liability Management?

Overview

Key Points in this Chapter:
- ALM is more than Interest Rate Risk Management. It looks at several risks as well as the returns for the Credit Union.
- ALM looks to control – not minimize – the risks of the Credit Union.
- Properly performing ALM increases the chances of success at a Credit Union.
- ALM is an integral part of the Financial Management Process.

Overview

Over the years, ALM has been described in a number of ways, including being a “necessary evil” to appease the examiners, or a more narrow view of ALM, which is to manage Interest Rate Risk only.

First, ALM is an integral part of the Financial Management Process. As you learned in the previous chapter, this includes Long Range Planning and the Budgeting Process. All functions are critical to insure financial goals are met at the Credit Union, as well as controlling different risks.

These functions need to be well coordinated with each other, otherwise conflicting goals may arise. In one example, a particular Credit Union had certain members of their staff create the budget, others performed ALM, and the board of directors took care of the Long-Range Strategic Planning. Each respective group had their own set of plans. Since none of the groups and their respective plans were coordinated, performance of the Credit Union was well below expectations, as well as their peers.

Definition of Asset/Liability Management:
The role of ALM has a very broad reach in the Credit Union, and goes beyond just Interest Rate Risk Management. Notice there are several key words or phrases in the above definition of ALM.

Asset/Liability Management is the Process of Evaluating and Executing Actions to Control the Credit Union’s Risks and Reach its Financial Goals.

First, ALM is a process. You can have the best ALM model and the people to run it, however if the process is incorrect, you may be missing opportunities within the Credit Union. As mentioned earlier, at a minimum, it must be coordinated with the Long Range Planning Process and the Budgeting Process. Since people and systems make a process work effectively, all parties involved must work together to coordinate these disciplines.

Second, Evaluating and Executing Actions is essential to a proper ALM process. For example, let’s assume your Credit Union measured the current ALM risk position and the Credit Union is well within its ALM policy guidelines. (More will be discussed on policy guidelines later in this booklet). The current position is what exists now. The Credit Union may then proceed to purchase securities, make loans, or accept funding sources from members. These “actions”, or strategies, could make the future risk position outside of the Credit Union’s ALM policy. These actions need to be evaluated to help insure the Credit Union’s future position is also within guidelines. What-ifs through an ALM model are an effective way to achieve this. The point is you must look at past, present, and future actions to properly manage ALM. Tips will be given in later chapters to help with this concept.
Third, Controlling the Credit Union’s Risks identifies that you should be aware of major risks facing the institution. Risks will be discussed in Chapter 6. However, there is one key word in this phrase – Control. Notice it does NOT say minimize risks. Contrary to popular belief, ALM should never be used to minimize risk. If you did, you would have no loans and no investments other than treasury securities – because any instruments other than treasuries would be adding to risk. Controlling risks means to find an acceptable and controllable level of the different risks while meeting the goals of the Credit Union. ALM is a balancing act.

Fourth, notice our definition of ALM involves the process of Reaching the Credit Union’s Financial Goals. This is key to the ALM process. For example, a steady, achievable ROA of 1.5% to 2.0% may be a key financial goal. Steady growth over time may be another. Performing “what-ifs” can help in evaluating actions to help achieve these goals. By coordinating actions, along with risk management and financial goal setting, the ALM process becomes much more complete.

Throughout this booklet, ROA will be used in in many examples. For Credit Unions, ROE may be a more appropriate measure in many cases involving ALM. The reader should note that while ROA may be illustrated (for simplicity purposes), the Credit Union could easily use ROE as one of the primary ALM measures.

**How ALM fits into the Financial Management Process – the “Top Three”**

In Chapter 2, the Financial Management Process that begins with Long Range Planning was introduced, and continues through to Member Profitability. The “Top Three” items – Long Range Planning, ALM, and the Budgeting Process - should form the nucleus of the Financial Management Process for practically all Credit Unions. Figure 2.1 was an illustration showing an overview of the process.

Figure 3.1 shows more detail for the top three, showing the major functions of each. Note many of the functions overlap. For example, #4 Goal Setting is not only a function of Long Range Planning, but also the ALM process. Similarly, #6 Strategies are functions of both ALM and of the Budgeting Process. This is because all of the functions are integrated, yet each function is important in its own right. Functions #4 through #6 are specific to ALM, and will be discussed in detail in later chapters.

![Figure 3.1 Functions of the “Top Three” in the Financial Management Process](image-url)
As a sneak preview, let’s look at the value of ALM to a Credit Union. One of the key functions that ALM covers is #6 Strategies. Strategies can help a Credit Union reach its goals and control its risks and financial position. Let’s walk through a simple example of a strategy and see how ALM would help determine whether the Credit Union should pursue the strategy.

Suppose some of the Credit Union’s competitors (Credit Unions, thrifts and other Credit Unions) began to offer a “CD special” at a very attractive interest rate. The interest rate was clearly above market - above most all of the Credit Union’s deposit products - and some of the members started to ask whether the Credit Union would offer a similar product. The ALCO was looking at various options. What are some of the Credit Union’s choices?

1. Do nothing – the interest rate that the Credit Union would have to match is clearly above the Credit Union’s cost of funds. To offer a competing CD product would raise the Credit Union’s cost of funds.

2. Match the competition. Offer a similar term CD with a similar rate.

3. Out-do the competition. Go one better by offering a better term and a better rate CD special.

4. Come out with a CD special but at a slightly lower interest rate than the competition. After all, our Credit Union has better service than the competition, and this should be enough to satisfy the members.

5. Let the board of directors make the decision.

Note there are many choices, and there could be others not listed here. Which is the right choice? How does each choice affect the Credit Union now and in the future? Does offering a CD special in #2, #3, and #4 above enhance or detract from the other goals the Credit Union has?

The answer is – at this point, we don’t know. Moreover, by making a wrong decision, we could be placing the Credit Union in an undesirable financial position in the future. Remember, ALM helps to evaluate and execute actions to control the Credit Union’s risks and financial position. The point is this: without ALM, we are taking chances that our decision may be right or wrong. We will make an uninformed decision – with possible effects reaching thousands if not millions of dollars.

By making an intelligent well-informed decision, the chances of us being “wrong” are less. Conversely, a well-informed decision helps us being “correct” more often. The value of ALM is to help us manage the Credit Union to help better serve the member base, and at the same time give maximum return to the shareholders. Later this chapter will take you through an exercise to see which potential answer on the above scenario is “more correct” than the others.
Why Does the Credit Union Need ALM?
At a previous Credit Union conference in which ALM was a topic being presented. ALM was referred to by an attendee as “voodoo accounting.” He went on to say that he never understood what ALM was, and saw no value in it. (In fact, he left halfway through the presentation.) Towards the later part of the presentation, the speaker gave several examples of ALM strategies that improved the Credit Union’s financial position AND served the member base at the same time. The executive should have stayed for the remainder of the presentation so he could have taken some interesting ideas back to his Credit Union!

So what is ALM all about, and why is it so important? We had seen earlier that Goal Setting, Policy and Measurement Systems, and Strategies are functions within the ALM process. This is because the intent of ALM is to coordinate the assets and liabilities of the Credit Union, with all of the factors affecting them.

Figure 3.2 is a picture of the various large groups of accounts on a Credit Union’s balance sheet. Loans, various types of investments, the Credit Union’s building, branch facilities, and other fixed assets, cash, etc. all make up the asset side of the balance sheet. DDA’s, savings, CD’s, IRA’s, etc. make up the deposits of the members, while stock and retained earnings compose the capital or net worth section of the Credit Union.
When you analyze the balance sheet, think of it as “inventory”. The Credit Union is a “financial store” with dozens if not hundreds of different “products and services” that are offered to the members. Each product and service has its own interest rate, term, prepayment pattern, and purpose. To complicate things further, external factors such as the economy, interest rate environment, and competition help shape not only what products and services the Credit Union offers its members, but also how the products and services are “packaged and delivered”. All of these factors require a great deal of coordination. This is what ALM does – coordinate. With a coordinated effort, the Credit Union can serve its members in the best way possible. Without the coordinated effort of ALM, the Credit Union may find itself balancing assets and liabilities haphazardly and eventually find itself in an undesirable financial position.

A Practical Example of ALM at Work

Each week, most Credit Unions call their competition, or surf their competitor’s web sites, and find out what rates they are paying on various deposits, and perhaps ask about their loan rates. This “window shopping” is a common practice to gauge where the Credit Union rates are relative to the local market.

Let’s say a Credit Union may decide to be above the average of the current market in paying deposit rates. Figure 3.3 illustrates an example rate environment, and Sample Credit Union’s position. Note the Credit Union is second in the market, only to the Thrift. Also, note that most institutions offer “CD specials” which are reflected in the figure.

<table>
<thead>
<tr>
<th>Products</th>
<th>Sample Credit Union</th>
<th>Credit Union “B”</th>
<th>Credit Union “C”</th>
<th>Thrift “D”</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM Checking</td>
<td>2.15%</td>
<td>1.75%</td>
<td>2.15%</td>
<td>2.25%</td>
</tr>
<tr>
<td>CD’s – 3 mths</td>
<td>2.75%</td>
<td>2.25%</td>
<td>2.65%</td>
<td>2.85%</td>
</tr>
<tr>
<td>CD’s – 12 mths</td>
<td>3.00%</td>
<td>2.75%</td>
<td>2.90%</td>
<td>3.10%</td>
</tr>
<tr>
<td>CD’s – 36 mths</td>
<td>3.30%</td>
<td>3.00%</td>
<td>3.25%</td>
<td>3.35%</td>
</tr>
<tr>
<td>CD “specials”</td>
<td>14 mth – 3.5%</td>
<td>8 mth – 3.0%</td>
<td>15 mth – 3.35%</td>
<td>21 mth – 3.4%</td>
</tr>
<tr>
<td>Simple average</td>
<td>2.94</td>
<td>2.55</td>
<td>2.86</td>
<td>2.99</td>
</tr>
</tbody>
</table>

Figure 3.3 Example of Competitive Rate Environment.

Now let’s assume rates have fallen (see Figure 3.4). Because Sample Credit Union’s philosophy is to be slightly above the market, it has questions to ask and decisions to make. Do we remain where we are in rates? Do we follow the market? Do we offer a super CD product well above the market? Or do we change our philosophy to be in the lower or middle of the market? Note in Figure 3.5 that each decision may bring very different results. The decision the Credit Union makes, and the corresponding consequences are an example of the ALM process.

For example, making a choice not to lower rates with the market (Choice 2 in Figure 3.5) may eventually bring more deposits to the institution because the Credit Union is near the top in all rates to the market. However, the consequences to this decision may bring an inflow of “hot money” and the Credit Union’s margin may shrink. Why? Because Sample Credit Union may not be able to loan the new money fast enough.

Choice 3 may see more money go to the new 17 month CD special. But the Credit Union may see money go from its 12 and 36 month products to the new 17 month – thus “cannibalizing” its own deposit base and shifting funds from lower cost deposits to higher cost CD specials.
Thus, the decision is not as simple as just changing rates. Modeling of the volumes are equally important to see the true impact of the changes. ALM looks at the impact of each of the potential actions before the decision is made. It then helps make the right decision, and tracks the decision over time.

## Another Example of ALM at Work

In another example of ALM, a $180 million dollar Credit Union was considering an auto loan promotion for their members. The Credit Union’s marketing department (in cooperation with an idea from the loan department), had determined that there is considerable demand by their member base for an “auto loan special.” This special promotion would feature a low “teaser” interest rate for the first year, and fixed thereafter. Both the teaser rate and the ending fixed rate of interest would be slightly below the “market” of other Credit Unions and credit unions in the area. Because the teaser interest rate was so attractive, the marketing department intended to “blow the doors off” the competition by sending mass mailings to their current members, web site promotions, and a heavy local advertising of the auto loan special. The marketing and loan departments were looking to put as many auto loans on the books of the Credit Union as they could – the sky was the limit.

### Products

<table>
<thead>
<tr>
<th>Products</th>
<th>Sample Credit Union NOW</th>
<th>Credit Union “B” New Rate</th>
<th>Credit Union “C” New Rate</th>
<th>Thrift “D” New Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM Checking</td>
<td>2.15%</td>
<td>1.55%</td>
<td>2.00%</td>
<td>2.05%</td>
</tr>
<tr>
<td>CD’s – 3 mths</td>
<td>2.75%</td>
<td>2.05%</td>
<td>2.45%</td>
<td>2.65%</td>
</tr>
<tr>
<td>CD’s – 12 mths</td>
<td>3.00%</td>
<td>2.55%</td>
<td>2.70%</td>
<td>3.00%</td>
</tr>
<tr>
<td>CD’s – 36 mths</td>
<td>3.30%</td>
<td>2.80%</td>
<td>3.05%</td>
<td>3.15%</td>
</tr>
<tr>
<td>CD “specials”</td>
<td>14 mth – 3.5%</td>
<td>8 mth – 2.9%</td>
<td>15 mth – 3.25%</td>
<td>21 mth – 3.2%</td>
</tr>
<tr>
<td>Simple average</td>
<td>2.94</td>
<td>2.37</td>
<td>2.69</td>
<td>2.81</td>
</tr>
</tbody>
</table>

Figure 3.4 Illustration if rates fall.

<table>
<thead>
<tr>
<th>Products</th>
<th>Sample CU NOW (stay the same)</th>
<th>Sample CU Choice 1 – Move Rates Down</th>
<th>Sample CU Choice 2 – Move Rates Down Slightly</th>
<th>Sample CU Choice 3 – Move Rates Down but offer a new 17 month “CD special”</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM Checking</td>
<td>2.15%</td>
<td>1.95%</td>
<td>2.00%</td>
<td>1.95%</td>
</tr>
<tr>
<td>CD’s – 3 mths</td>
<td>2.75%</td>
<td>2.55%</td>
<td>2.65%</td>
<td>2.55%</td>
</tr>
<tr>
<td>CD’s – 12 mths</td>
<td>3.00%</td>
<td>2.75%</td>
<td>2.90%</td>
<td>2.70%</td>
</tr>
<tr>
<td>CD’s – 36 mths</td>
<td>3.30%</td>
<td>3.10%</td>
<td>3.20%</td>
<td>3.15%</td>
</tr>
<tr>
<td>CD “specials”</td>
<td>14 mth – 3.5%</td>
<td>14 mth – 3.0%</td>
<td>14 mth – 3.25%</td>
<td>17 mth – 3.5%</td>
</tr>
<tr>
<td>Simple average</td>
<td>2.94</td>
<td>2.67</td>
<td>2.80</td>
<td>2.78</td>
</tr>
</tbody>
</table>

Figure 3.5 Choices Sample Credit Union has if rates fall.

### CHOICES
Remember, ALM is the process of evaluating and executing actions to control the Credit Union’s risks and financial position. In this context, the Credit Union ran several “what-ifs” of the idea in their ALM model before the strategy was implemented. The “what-ifs” served to evaluate potential actions. They found that below a $5 million dollar new volume in the loan promotion, it would be better off not doing the promotion. Why? Because the up front costs (advertising, promotional material, loan application expenses, etc.) would make the project less profitable than other alternatives the Credit Union could employ.

Conversely, they found that if the Credit Union issued over $18 million in new auto loans, it could actually hurt the Credit Union. Why? Because of the teaser rate (a low fixed rate for one year), combined with a fixed rate for the remainder of the term of the auto loan, along with a high volume in dollars, would put the Credit Union at risk if interest rates rose in the future. Credit risk would also be a factor given a potential for less than optimal loan quality. Finally, a high dollar volume of issued loans would have meant liquidity issues for the Credit Union. Over $18 million in loan volume would have the potential risks outweigh the potential rewards. Figure 3.6 illustrates these points. Note with a low loan volume of $5 million, Return on Assets (ROA) under each scenario is less than doing no promotion at all. With a high volume of loans, there would be a potential of high variability ROA of the Credit Union.

<table>
<thead>
<tr>
<th>Average ROA next 36 months Under Each Scenario</th>
<th>No Auto Loan Program</th>
<th>5 Million</th>
<th>10 Million</th>
<th>15 Million</th>
<th>20 Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rising Rates</td>
<td>1.21</td>
<td>1.18</td>
<td>1.24</td>
<td>1.20</td>
<td>1.11</td>
</tr>
<tr>
<td>Flat Rates</td>
<td>1.32</td>
<td>1.28</td>
<td>1.33</td>
<td>1.34</td>
<td>1.36</td>
</tr>
<tr>
<td>Falling Rates</td>
<td>1.40</td>
<td>1.34</td>
<td>1.41</td>
<td>1.42</td>
<td>1.46</td>
</tr>
<tr>
<td>“Range” of ROA</td>
<td>.19</td>
<td>.16</td>
<td>.17</td>
<td>.22</td>
<td>.35</td>
</tr>
</tbody>
</table>

So what was the decision? The Credit Union set a target minimum of $6 million of new auto loans, but capped the potential new volume at $12 million. This range, although narrower than the original what-if analysis showed, gave a more conservative target in order to help insure the Credit Union met their financial goals. The Credit Union actually issued $8.5 million in new auto loans during the auto loan promotion and deemed it a success. Using the ALM definition, the Credit Union evaluated their actions, and in doing so controlled their risks, and the profits from the promotion helped better their financial position. Finally, the members got a great deal on an auto loan! This is ALM at work.
Chapter 4: The ALM Process – the Basics

Key Points in this Chapter:
- Asset/Liability Management is a Process, NOT a periodic exercise.
- As part of the ALM process, there are a number of items the Credit Union should perform “up front”, and others on an annual, quarterly, or monthly basis.
- ALM has unlimited practical applications. New product and service offerings, interest rate changes, pricing, growth of the Credit Union, etc. are just a few of the examples of areas touched by ALM.

The Basic ALM Process at a Glance
As mentioned in our definition of ALM, it is a process. It involves a number of activities – and people to carry them out - to make it successful. This point cannot be overemphasized. Rather than just reporting ALM results, it must become an integral part of the day-to-day Credit Union activities.

Figure 4.1 A Basic Overview of the ALM Process

Figure 4.1 shows an overview of the ALM process. Note it is a slightly more detailed view than the ones shown in Figures 2.1 and 3.1 in previous chapters. Later in this booklet, the ALM functions of Goal Setting, Policy and Measurement System, and Strategies will each be discussed. In each of the functions, a step-by-step guide on what to do in the ALM process is included. Note that each has items that are done “up front” and others, only as necessary.
Many times the question “What do I need to do?” is asked. The end of this chapter, provides a basic checklist of the process: what is done “up front”, annually, quarterly, monthly, and as needed. It is broken out by the various functions of Goal Setting, Policy and Measurement System, and Strategies as functions in the ALM process. In addition, each chapter and/or appendix in this booklet is referenced to learn more about the subject. Use it as a guide for the Credit Union for its ALM process.

Although the ALM process has been broken down into the steps listed above, there is as much “art” in ALM as there is “science”. Over the years, the ALM process has been refined; however, it is up to the ALCO, board of directors, and the employees of the Credit Union to make ALM a success. A fair amount of judgment is expected in each of the steps. The Credit Union must consider many factors to tailor the steps to their organization, and to develop a realistic and solid implementation schedule for those steps. These factors include:

- Size of the Credit Union
- Past growth rate of the Credit Union
- Current ALM expertise of the ALCO and the board of directors
- Complexity of the Credit Union’s balance sheet
- The financial strength of the Credit Union
- Future plans of the Credit Union
- Local factors such as the Credit Union’s member base, competition, and local market conditions

The “up front” items are steps the Credit Union needs to consider to start the ALM process off on a correct note. All of them make sense for most Credit Unions. For example, the ALM policy is not only a good idea, but also many Credit Union examiners will be asking for it during their exams. An ongoing education plan is also necessary as the Credit Union, ALCO, and board of directors will be asked to look at their Credit Union in a very different way, different from just reporting the financial statements and budgets. ALM is an evolving subject, and the education plan needs to evolve as well.

For smaller, less complex Credit Unions, once a quarter is usually enough to hold an ALCO meeting and measure the Credit Union’s ALM position. Larger, more complex Credit Unions may need to do it monthly. Also, if the Credit Union finds itself in an undesirable ALM position – regardless of size – once a month may be necessary. The point is to keep on top of changes in the Credit Union, and constantly monitor the risks and financial position as these changes occur.

Many consider the Strategies function of ALM “the most fun.” This is because strategies can be found in most every action the Credit Union takes. New auto loan programs, marketing campaigns, new member drives – all are examples of strategies employed by the Credit Union, and measured by ALM. More about strategies, as well as goals, the policy, and measurements will be discussed in the chapters ahead.
### ALM Process Checklist

**“Up Front” items:**

<table>
<thead>
<tr>
<th></th>
<th>ALM Functions:</th>
<th>Where to find the details:</th>
<th>Checklist ✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Goal Setting</td>
<td>Chapters 1 through 3</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Policy and Measurement</td>
<td>Chapter 9</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Policy and Measurement</td>
<td>Chapter 8, Appendix A</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Policy and Measurement</td>
<td>Appendix D</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Strategies</td>
<td>Chapter 9</td>
<td></td>
</tr>
</tbody>
</table>

**Once a Year:**

<table>
<thead>
<tr>
<th></th>
<th>ALM Functions:</th>
<th>Where to find the details:</th>
<th>Checklist ✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Goal Setting, Strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Goal Setting</td>
<td>Chapter 5</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Policy and Measurement</td>
<td>Chapter 7</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Policy and Measurement</td>
<td>Chapter 8, Appendix A</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Policy and Measurement</td>
<td>Chapter 8</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Strategies</td>
<td>Chapter 8</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>All ALM Functions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As needed:</td>
<td>ALM Functions:</td>
<td>Where to find the details:</td>
<td>Checklist</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-----------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>13. Have the Credit Union’s ALM measurement system show the Credit Union’s financial position and risk positions:</td>
<td>All ALM Functions</td>
<td>Appendix B, Appendix C, Appendix D</td>
<td>✓</td>
</tr>
<tr>
<td>■ Financial Position</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Financial Statements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- CAMELS ratios, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Peer Group information (when available)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Risks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Credit and Liquidity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- IRR on Capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- IRR on Earnings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Other ALM measures as appropriate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Other Balanced Scorecard measures as appropriate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Regular ALCO meeting</td>
<td>All ALM Functions</td>
<td>Chapter 9, Appendix C</td>
<td>✓</td>
</tr>
<tr>
<td>■ Discuss Past, Present, and Future ALM positions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Show results of strategies that have been implemented.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Track on-going results. Perform what-ifs on new strategies.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Pick a subject for ongoing internal education of the ALCO.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>■ Other business as necessary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Normal Board of Directors meeting</td>
<td>Goal Setting</td>
<td>Chapter 9</td>
<td>✓</td>
</tr>
<tr>
<td>■ Show results of the Balanced Scorecard and ALM position on a level deemed appropriate for the board of directors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As needed:</td>
<td>ALM Functions:</td>
<td>Where to find the details:</td>
<td>Checklist</td>
</tr>
<tr>
<td>16. Come up with new strategies for the Credit Union as conditions and information change. Perform “what-ifs” as necessary.</td>
<td>Strategies</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>17. Decide on an appropriate ongoing communication and education plan to the board of directors, members of management and employees.</td>
<td>Strategies</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>18. Periodically review the above steps and see if any corrective action is necessary.</td>
<td>All ALM Functions</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Chapter 5: Goals and Returns to the Credit Union

Key Points in this Chapter:
- A key function of both Long Range Planning and ALM is Goal Setting. Proper Goal Setting is important for ALM to succeed.
- Once you measure the Credit Union’s ALM position, you can check risks, and also optimize the Credit Union’s returns by employing effective ALM strategies.
- These strategies can be anything affecting the financial statements of the Credit Union. Some strategies have a small impact, others large.
- Performing what-ifs are a critical component of optimizing the risk vs. return equation at a Credit Union. What-ifs can also help avoid mistakes.

Coming up With Goals for the Credit Union
Let us perform a fun little exercise. On the list below, list the top three goals of the Credit Union. Make them in priority order, that is, Goal #1 is more important than Goal #2, etc.

Goal #1
__________________________

Goal #2
__________________________

Goal #3
__________________________

Proper Goal Setting is a critical function of both the Long Range Planning and ALM areas of the Financial Management Process. Without proper goal setting, ALM has a poor chance of succeeding. Ultimately the strategies and detailed action plans to carry out the goals must have someone (or a group) responsible for them. For example, the following in Figure 5.1 are not proper goals:

1. Our Credit Union will become more profitable.
2. Our Credit Union will gain market share.

Figure 5.1 Example of improper goals

Why? Because the example of the goals listed above have no sense of quantity and time. Taken to an extreme the first goal can be met by simply making one dollar more in income than the Credit Union had in the previous period. Since goals must be measurable and have a time dimension, the above goals can be better stated as follows in Figure 5.2.

1. Our Credit Union will improve Return on Assets (ROA) from the current level of 1.3% to a 1.7% by the end of 2006.
2. Our Credit Union will move from 5% of the local deposit base (as measured by FDIC and NCUA figures) to 7% by the end of 2006.

Figure 5.2 A “better” look at goals

A detailed look at goal setting - and its implications with Long Range Planning - is beyond the scope of this booklet. However, the goals of the Credit Union will greatly influence the ALM policy and practices the Credit Union employs. Thus, we will look at how goal setting relates to ALM and give you some tips in the process.
Purpose of Goal Setting
The main purpose of Goal Setting is to take the Mission, Vision, and Core Values developed in the Long Range Planning part of the Financial Management Process and set the short and long-term objectives for the Credit Union. Without goals, the ALM process would be nearly meaningless. This is because ALM has nothing against which to compare. Without goals and objectives, ALM cannot determine whether the Credit Union is meeting any meaningful measures.

It is here that ALM and Long Range Planning overlap. Goal Setting can be a fun and useful exercise that many Credit Unions usually perform at an annual Strategic Planning session. It is here that both management and the board of directors participate in setting goals, and check on the progress of those established in prior years. As needed, goals may be altered based on conditions. For example, if a Credit Union is in a community dominated by a large employer in a particular industry (Detroit for automobiles), and the community has experienced a large amount of layoffs of the member workforce, the Credit Union may need to rethink their goals. Thus, goals are “fluid”. Although many are usually established annually, some can change throughout the year.

In order for goals to be useful, they must be able to pass at least three “tests”. Goals must be:

1. **Measurable** (measured in the goal itself, through ALM, board reporting, or a “Balanced Scorecard”)
2. **Have a time dimension** (beginning point, ending point, and progress points)
3. **Be reasonable** as they relate to other goals.

Goal Setting and its Impact on ALM
The following example will illustrate this point. Let’s assume the two “better” goals in Figure 5.2 shown above were part of the goals of the Credit Union. Note they are measurable and have a time dimension. Since profitability is described in Goal #1, then measures such as ROA or even Net Income should become an important part of reporting and monitoring; as well as the discussions of the ALCO. For Goal #2, market share measures such as local competition for deposit dollars and their respective percentages are important.

If choices are to be made in various ALM strategies, the goals above need to be taken into account. For example, one simple strategy to maximize ROA is to slow growth, and in turn try to maximize the bottom line in relation to asset growth. However, this may not be in the best interests of the Credit Union in the long run.
In addition, some goals may conflict with other goals. Goal #2 assumes the Credit Union will increase market share. One strategy is to raise rates on deposits in order to attract more funds. However, this strategy may be counter to Goal #1 because raising rates may lower the ROA of the Credit Union.

Conflicting goals as illustrated above point out the importance that ALM strategies balance the goals of the Credit Union. If Goal Setting tells what the Credit Union should do, the ALM process discovers how it should do it. For example, assuming the two goals above are both important, the ALCO (along with other members of the Credit Union) would look at alternative ALM strategies to meet both goals. One strategy would be to enhance their image and market share perhaps through a well-positioned branch network. They could gain the deposit dollars of the small business employee, and perhaps the loans of these members, in the form of business loans. New product and service offerings could also increase growth AND ROA. What-ifs could be run to determine whether this strategy is viable.

Figure 5.3 illustrates potential what-ifs in several different hypothetical strategies. All have been run in an ALM model to compile the results, and all look out three years into the future from December 2003 to December 2006. Strategy A has the most potential from a ROA return standpoint, and has the highest Capital to Asset ratio. Strategy C has a slightly lower return from the current situation, but gains the most in market share. Which is best? That depends on the priority of the goals of the Credit Union, and what the Credit Union is willing to “live with.”

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1.3%</td>
<td>1.7%</td>
<td>1.5%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Capital to assets Ratio</td>
<td>12.5%</td>
<td>14.2%</td>
<td>12.9%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Total Assets</td>
<td>100,000,000</td>
<td>110,000,000</td>
<td>130,000,000</td>
<td>150,000,000</td>
</tr>
<tr>
<td>Total Deposits</td>
<td>86,000,000</td>
<td>95,000,000</td>
<td>111,000,000</td>
<td>107,000,000</td>
</tr>
<tr>
<td>Deposit Base Market Share %</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Figure 5.3 Illustration of several what-if strategies and their potential returns. This is also a simplified example of Strategic Positioning.

Figure 5.3 also illustrates a concept called Strategic Positioning. Notice information other than ROA is given, AND it looks at different alternatives. This is because relying on a single measure is a dangerous practice. ALM needs to look at a number of measures to balance the risk/return tradeoff. Strategic Positioning is an excellent way to evaluate strategies and possibly modify the original goals once it is realized that certain goals may be unachievable.
For example, notice no strategy in Figure 5.3 meets both goals illustrated above. Either the profitability goal
is not met (Strategy B and C), or the market share goal is not met (Strategy A and B). Note Strategy B meets
neither goal, yet many would argue it is the best compromise of all the strategies. This is where the third test
of goal setting – the goals are reasonable – comes into play. Perhaps the board of directors – and the ALCO –
may conclude that Goals #1 and #2 should be revised as follows:

1. Our Credit Union will maintain a Return on Assets (ROA) of at least 1.0% and Capital to assets
   of at least 10% through 2006.
2. Our Credit Union will move from 5% of the local deposit base (as measured by FDIC and NCUA
   figures) to 7% by the end of 2006.

Now Strategy C becomes something to explore even further, since it is the only strategy to potentially meet all
of the revised goals of the Credit Union.

Risks play an equal role to returns. In addition to looking at the returns as illustrated in Figure 5.3, the Credit
Union also needs to look at the risks of each strategy; and, there are several risks that may alter our original
returns. In the next chapter, we will examine each risk as it relates to ALM.

Financial Targets Versus ALM Policy Limits
Goals can be measured a wide variety of ways:

- In the goals itself (see example in Goal #1 and #2 above)
- Through a reporting mechanism such as ALM and/or board of directors reporting
- Through a Balanced Scorecard

Figure 5.3 shows several what-if strategies, their potential outcomes, and the Goal measurement under each
strategy. This measurement is part of the Financial Target the Credit Union wishes to achieve. Financial Targets
are closely tied to the various Goals, and are the normal operating targets the Credit Union wishes to have.
In many instances, Financial Targets can be stated as minimums. For example, the Credit Union may want
to achieve 1.7% ROA, but it is willing to “live with” .8%. The reporting mechanism would show a >.8% as the
minimum target for the Credit Union.

ALM policy limits are usually “worse” than financial targets. They represent the “line in the sand” that the
Credit Union will not go beyond, except in unusual circumstances. One way to illustrate this is to think of the
financial target limit as the “yellow zone”, and the ALM policy limit as the “red zone”. Using a sports analogy,
the ALM policy limit is “out of bounds.”
Figure 5.4 is an example of this concept, using December 31, 2003 as the most recent month. Taking ROA as the example, notice there are three levels of ROA Year to Date:

1. ALM policy limits,
2. Minimum Financial Targets,
3. Long Range Goal.

Some Credit Unions report one or all of these figures side-by-side with the actual measure. This way they can see the progress of reaching the Credit Union’s goals, while monitoring the strategies that were implemented to meet them.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA YTD %</td>
<td>.79</td>
<td>.74</td>
<td>.87</td>
<td>&gt;.35</td>
<td>&gt;.8</td>
<td>1.7 to 2.2</td>
</tr>
<tr>
<td>Meets ALM Policy Limit?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meets Minimum Financial Target?</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meets Long Range Goal?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.4 Example of ROA compared to various measures
Chapter 6: Risks

Key Points in this Chapter:
- There are four main risks that ALM measures and manages.
- Be aware there is a big difference between calculating risks (measuring), and managing risks (day to day Credit Union decisions, actions, and activities). Both are important.
- Goals and Strategies may need to be modified if the Credit Union determines risks are too great.

Defining Risks
Webster defines risk as the “chance of encountering harm or loss.” Life itself is filled with different risks. Some activities, businesses, lifestyles, and events have more risk than others do. Remember when you were a child and learned (perhaps the hard way) that putting a finger in a fire has risks? If you were victim to the drop in value of the Dot-bomb stocks of 1999 and 2000, you are also painfully aware of financial risk.

The city of Las Vegas, Nevada, typifies the ultimate example in calculating risks. Using mathematical probabilities, casinos have calculated the odds of each type of game, and their respective probability of the various outcomes. Knowing the true risk of playing the games in the long run, Las Vegas casinos can publish odds that are slightly in favor of the casino, and less in favor of the player. Think about it – the city of Las Vegas was not built on people like you and me winning all the time. Las Vegas casinos have nearly perfected the art of calculating and measuring risks, and then managing risks by controlling them in their favor.

This concept of risk is similar to a Credit Union. Credit Unions have goals, and strategies to achieve these goals. Various risks may thwart all of the best-laid plans the Credit Union has. Therefore, the Credit Union needs to calculate and measure risk, and then manage those risks by controlling them.

So how does risk relate to a Credit Union? Since the Credit Union is a financial intermediary, by accepting deposits such as IRA’s, CD’s, and checking accounts, it assumes the obligations to repay those deposits to its members. It takes the money from these deposits and makes loans, purchases various investments, and invests in facilities, people, technology, etc. to serve their members. All of these assets and liabilities just described have different characteristics: rates, maturity terms, re-pricing intervals, prepayment capabilities, credit quality, etc. The more unknown these characteristics are, the more risk there is for the Credit Union.

It must be pointed out that risk is not a bad thing. Credit Unions extend risk every day by making loans, buying investments, and even accepting deposits. Remember – one of the goals of ALM is to control risks to an acceptable level for the Credit Union. If many items are unknown, or at the very least cannot be estimated, then control becomes a higher factor in managing the Credit Union.
Definition of Risk for a Credit Union

Risk is the potential that events and/or actions may have an adverse impact on Capital and/or Earnings.

Risk for the Credit Union comes in many types. For example, Credit Risk – an all too familiar risk to some Credit Unions – deals with the potential of the members not paying their loan obligations, or bonds in the Credit Union’s investment portfolio defaulting. Additional risks will be discussed later. Below are the four main risks measured by ALM facing most Credit Unions today:

1. **Credit Risk** - risk that some loans and investments may not be repaid, thus incurring a loss to the Credit Union. Credit risk has implications of asset mix, asset quality issues, and on the Credit Union’s ability to leverage its capital.

2. **Liquidity Risk** - risk that not enough cash will be generated from either assets or liabilities or outside sources to respond to the needs of depositors and/or borrowers. In other words, member service could diminish with high levels of liquidity risk because demand cannot be met.

3. **Interest Rate Risk (IRR)** – is composed of two components:
   - **IRR on Earnings** - the risk that changes in prevailing interest rates will adversely affect the earnings stream of the Credit Union. This includes interest income and expense effects. In other words, the effect of interest rates on the income statement.
   - **IRR on Capital** (also called Price Risk, Valuation Risk, or Market Risk) - the risk that changes in prevailing interest rates or market conditions will adversely affect the values of assets and liabilities. In turn, the capital – the remaining amount – could be affected. IRR on Capital is the balance sheet valuation effect due to changes in interest rates and other market factors both internal and external to the Credit Union.

There are many other risks, such as Operations Risk, Strategic Risk, Reputation Risk, etc. As an example, a Credit Union having a flood at their DP center, may be dealing with Operations Risk, since the ability to serve the members and have ongoing operations may be in jeopardy. These other risks are beyond the scope of this booklet.
How the Four Main Risks are Interrelated

As you will see in the following chapters, you can derive good measurements of the four main risks at the Credit Union. However, since many activities you perform at the Credit Union are interrelated, so are the risks.

Let’s take an example. Suppose the Credit Union wants to lower Interest Rate Risk, so a strategy it employs is to make as many accounts on the balance sheet have a variable rate of interest. Taken to an extreme, all loans in this strategy are variable rate loans that rise or fall with the prevailing interest rates. All of the deposits and investments will follow the same philosophy. The theory behind this strategy is since all accounts rise or fall with interest rates, the net interest margin of the Credit Union should stay constant. Constant net interest margin is one by-product of attempting to minimize interest rate risk. The Credit Union “thinks” it is immune to interest rate movements, because if rates on its deposits rise or fall, it could turn around and change the rates on its loans to the members. Sounds too good to be true - right?

Yes, the strategy is too good to be true. There are a number of flaws with this strategy. First, interest rates on each side of the balance sheet may rise or fall in different increments, and at different times. In other words, it is not a “one to one” relationship. Second, as rates rise, you may be able to re-price the Credit Union’s variable rate loans to the members at a higher rate, but this assumes the members can “absorb” the higher rate on their variable rate loans. Since cash flow is critical for members who have loans, a higher loan payment (because the interest charged to the member is higher) may translate into a credit risk problem. Higher rates may also slow loan demand, and raise deposit inflows, which may translate into a liquidity situation, thus liquidity risk may rise. Moreover, higher interest rates would have a general reduction in value (IRR on Capital) of the Credit Union’s investment portfolio. As you can see, trying to take care of one risk may cause others to have problems.

How Does a Credit Union Calculate Risk?

We have now discussed how Las Vegas calculates risk, so how does a Credit Union? First, the good news: Over time, various techniques have been developed to help calculate the various risks for a Credit Union. Some of them are even “early warning indicators” which look at potential risks for the future. Remember - there are four main risks for ALM. Therefore, it stands to reason that we need to do different calculations, or measures, for each risk.

Now the bad news: There is no “perfect” measurement of the different risks for the Credit Union. Some measurement techniques to calculate risks are even controversial. A few are hard to understand. Then there is the ultimate question: Once the Credit Union measures risk, what does the Credit Union do next? This is the art of managing risk. In later chapters, the various risk measures and their management in the ALM process will be explained.

As previously shown in Figure 5.3, let’s examine the potential returns for three different strategies. Let’s assume that risk has been measured, and for the various growth scenarios in Figure 5.3, our returns can now be expressed in ranges. The ranges are necessary because the outcome of the strategy is somewhat unknown. We “think” that ROA, Capital, etc. should be a certain value, but it could be higher or lower. This is because we are now considering risk for each of the strategies. Figure 6.1 illustrates this. Compare Figure 5.3 in the previous chapter with Figure 6.1 below. Note Figure 6.1 has additional information about each strategy to add the risk measurement component into the strategy.
How Goal Setting, ALM Risk Measures, and Strategies Work Together

Now with the additional information, which is the best strategy? If growth was a primary goal, you may choose Strategy C. The reason is the Credit Union is still getting adequate returns, but you are meeting the growth goal of getting to 7% market share. If earnings are paramount, you now have a decision. Notice Strategy C has a higher potential return (as measured by ROA) than the other strategies, but also has more risk, because it could also have the lowest return. This is because the ROA potential of Strategy C varies the most from the other strategies. The range is the largest of the three.

So what is the best strategy? Let’s go back and look at the process:

Goal Setting
Our original goals were (from Figure 5.2):

1. Our Credit Union will improve Return on Assets (ROA) from the current level of 1.3% to a 1.7% by the end of 2006.
2. Our Credit Union will move from 5% of the local deposit base (as measured by FDIC and NCUA figures) to 7% by the end of 2006.

Let’s also assume that the Credit Union can be “willing to live with” an ROA of .80%. This will help in our decision making process below.

Strategies
Only Strategy C could potentially meet Goal #1 and Goal #2. HOWEVER, it could also fail at Goal #1.
Policy and Measurements
Strategy C has the most variation in ROA and Capital to assets, BUT both measures are well above the .80% target “the Credit Union can live with.” Now the ALCO will need to make a decision:

a) Go for Strategy C for growth, (meeting Goal #2), realizing that ROA and Capital to Assets could drop, thus possibly not meeting Goal #1.

b) Go for Strategy A which is a more conservative view on growth (the Credit Union won’t meet goal #2), but it has a better chance of meeting Goal #1.

c) Revise the goals to be more reasonable, or keep searching for strategies that can meet both goals. This is called doing what-ifs in ALM.

Tough choices? Welcome to the balancing act that is ALM. The strategy you ultimately choose will totally depend on the management of the measurements, by weighing the pros and cons of each strategy, and the ALCO taking into account the risks of that strategy. This is an example of ALM in practice.

The Credit Union’s Balance Sheet Insurance: Capital
Figure 6.2 below shows a typical balance sheet for most Credit Unions. Member DDA’s, savings and other deposits compose the total deposits of the Credit Union. Other liabilities, such as FHLB advances, accrued expenses, etc. are usually smaller in volume than deposits, and together with deposits compose total liabilities. The total of Stock and Retained Earnings and Current Net Income is also called Net Worth or Capital of the Credit Union. In essence, it is the Assets less Liabilities of the Credit Union. It must be noted that both terms – Net Worth and Capital – are interchangeable. Over the years, the regulators have changed their terminology somewhat, but both terms are still used today.

Credit Union Balance Sheet (in 000’s)

<table>
<thead>
<tr>
<th>ASSET CATEGORY</th>
<th>BOOK AMOUNT</th>
<th>LIABILITY CATEGORY</th>
<th>BOOK AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>5,000</td>
<td>DDA’s, Savings and MM Checking</td>
<td>40,000</td>
</tr>
<tr>
<td>Investments</td>
<td>26,000</td>
<td>CD’s and IRA’s</td>
<td>45,000</td>
</tr>
<tr>
<td>Loans</td>
<td>65,000</td>
<td>Total Member Deposits</td>
<td>85,000</td>
</tr>
<tr>
<td>Allowance for Loan Loss</td>
<td>-1,000</td>
<td>FHLB advances</td>
<td>3,000</td>
</tr>
<tr>
<td>Net Loans</td>
<td>64,000</td>
<td>Other Liabilities</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total Deposits and Liabilities</td>
<td>89,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stock</td>
<td>4,000</td>
</tr>
<tr>
<td>Fixed Assets</td>
<td>4,000</td>
<td>Retained Earnings</td>
<td>6,000</td>
</tr>
<tr>
<td>Other Assets</td>
<td>1,000</td>
<td>Year to Date Income</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total Capital</td>
<td>11,000</td>
</tr>
<tr>
<td>Total Assets</td>
<td>100,000</td>
<td>Total Liabilities and Capital</td>
<td>100,000</td>
</tr>
</tbody>
</table>

Figure 6.2 Example Balance Sheet
Capital serves a number of purposes. It can be used for future growth. It also serves as a “cushion” or “insurance” from the various risks that affect the balance sheet. It is meant to absorb losses, and guard against future risks the Credit Union may be facing.

There are different definitions of Capital as well. The discussion below describes the different types of Capital:

1. **Accounting Capital.** This is a dollar value of total net worth (i.e. capital) of the Credit Union. In our example, it is $11,000,000.

2. **Regulatory Capital.** Also a dollar value, it is all Stock, Retained Earnings, and Net Income, and any other appropriations designated by management or the regulatory authorities. Those Credit Unions designated as a special investment Credit Union in a low-income area may have different amounts included as well. In our example, Regulatory Capital is the same as Accounting Capital or $11,000,000.

3. **Capital to Assets.** This is a CAMELS ratio that uses the capital figure and divides it into total assets. The simple computation would be:
   
   \[
   \text{Capital to assets} = \frac{11,000,000}{100,000,000} = 11.0\%.
   \]
   
   However, for the purposes of this ratio, as an alternative, total assets can also be measured by several “averages”, including the daily average balance for the quarter. Depending on which total asset value is used, the ratio can be slightly different from one Credit Union to the next.

4. **ALM Policy Capital to Assets.** Within the Credit Union’s ALM policy, what would be the minimum capital to asset ratio. For example, the ALM policy could have a minimum limit of 7.0%. Since the Capital to Asset ratio is well above our example, we are within the ALM policy limit.

5. **“Target” Capital to Assets.** The ratio is usually above the ALM policy guidelines, and is what the Credit Union believes is adequate for its goals and objectives.

6. **Economic Value of Equity (EVE) or Net Economic Value (NEV).** Both describe the same term and is an advanced look at capital. In essence, it takes the “fair value” of assets less the “fair value” of liabilities. Fair value is a somewhat controversial term. In many cases, discounted cash flow techniques are used to come up with the fair value of a particular asset and liability. EVE is capital “fair valued”, rather than accounting capital.

The term “Capital Adequacy” describes the “optimum” amount of capital the Credit Union should have currently and into the future. Capital adequacy can mean different things to different Credit Unions, and to really define what is adequate capital to a particular Credit Union is difficult. Even within the Credit Union, different members of the board of directors and management each have varying views of how much capital is adequate.
For example, a CEO believed that a 12% Capital to Asset ratio was “too low”. A member of the board of directors at the same Credit Union suggested the Credit Union’s target should be around 10%. At a different Credit Union – but in the same metropolitan area - another CEO argued that “anything higher than a 7% ratio would be ‘robbing’ the stockholders.” Both Credit Unions have overlapping member bases, and had similar risk characteristics on their balance sheet. As you can see, opinions can vary widely.

To get around this problem, many Credit Unions develop a range of capital that it considers to be adequate given the circumstances. It becomes an extension of the Credit Union’s “philosophy.” A good model to start is to take the minimum regulatory capital they desire and add to this figure given the circumstances. This becomes “target capital” described above. For example, if a Credit Union wishes to be a CAMELS 1 in relation to the “C” or Capital, then it would start with a 7% figure and work from there.

In Figure 6.3, let’s look at a sample computation of two Credit Unions to come up with target capital. One desires to start from a CAMELS 1 rating, the other from a CAMELS 2. Note the targets are well above the minimum desired CAMELS rating. Also, note the CAMELS 2 Credit Union has a zero value for the “other factors.” This may be because the combination of the local/national economy, member base strength, management strength, etc. is very good. Thus, the Credit Union may believe it does not need to compensate in Capital for these factors.

The “Comfort Cushion” is an extra addition to the Credit Union’s targeted capital and is a judgment call. Another way to look at this factor is to ask the question “did we miss anything?” It is a “gut feel” to add or modify the Credit Union’s target capital strictly as an extra cushion.

<table>
<thead>
<tr>
<th>“Target” Capital</th>
<th>CAMELS 1</th>
<th>CAMELS 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Minimum Regulatory Capital to assets Ratio</td>
<td>7.0</td>
<td>6.00</td>
</tr>
<tr>
<td>2. Add: Credit Risk component</td>
<td>1.00</td>
<td>.50</td>
</tr>
<tr>
<td>3. Add: Liquidity Risk component</td>
<td>.25</td>
<td>.50</td>
</tr>
<tr>
<td>4. Add: Interest Rate Risk component</td>
<td>.25</td>
<td>1.00</td>
</tr>
<tr>
<td>5. Add: Other factors (reputation of the Credit Union, potential member base, economic factors, etc.)</td>
<td>.25</td>
<td>.00</td>
</tr>
<tr>
<td>6. Add: “Comfort Cushion”</td>
<td>.25</td>
<td>.50</td>
</tr>
<tr>
<td>Possible “Target” Capital (total of 1 through 6 above)</td>
<td>9.00</td>
<td>8.50</td>
</tr>
<tr>
<td>Possible “Target” Capital Range</td>
<td>9.00 to 11.00</td>
<td>8.50 to 10.00</td>
</tr>
<tr>
<td>Possible ALM policy minimum</td>
<td>&gt;7.0</td>
<td>&gt;6.0</td>
</tr>
</tbody>
</table>

Figure 6.3 CAMELS 1 or 2 targets
From a regulatory view, CAMELS guidelines specify the different levels of Capital to assets ratio and other factors that are needed to achieve a particular “C” rating. However, many regulators want the Credit Union to have much more capital than the regulatory guidelines. This is because the regulator may see the risks of the Credit Union as being great, and thus are coming up with their own “target” capital figure for that particular Credit Union. In the defense of the regulator, this is a correct view of capital adequacy from their point of view. Remember, the Credit Union’s capital serves as the last line of insurance before any outside insurance - including the FDIC fund – will be paid. In case the Credit Union becomes insolvent, the regulator wants to minimize any payment by FDIC, and thus wants an individual Credit Union to have more than adequate capital.

EVE is a relatively new concept to the both Credit Unions and Credit Union regulators, and is inconsistently applied when being measured by Credit Unions and examined by the regulators.
Chapter 7: Measurement and Management – the Basics

Key Points in this Chapter:

- Be aware there is a big difference between calculating risks (measuring), and managing risks (day-to-day Credit Union decisions and activities). Even though there is a difference - both are important - and need to rely on each other for a successful ALM process.
- The Asset/Liability Committee or ALCO is the group that measures and manages the return/risk tradeoffs of ALM.
- There are a wide variety of ALM measurement techniques. Some are better than others, and some are controversial. Start simple – pick ones that make sense for the Credit Union.
- ALM Reporting is important in measuring a Credit Union’s financial and risk position. Past, present, and future measurements should be made. The ALM policy guidelines should be compared to the measurements.
- If a strategy is being considered in ALM, “what-ifs” look at the risk vs. returns of the strategy. ALM tools greatly help in this process.

The Difference Between Measurement and Management of the ALM Process

What is the difference between measurement and management of ALM? Measurements are the figures, numbers, and ratios from the balance sheet, income statement, or other statistics to help in the ALM process. They are the measurement of the risks and returns as defined in the previous chapters. For ALM, many measurements take on numerical form. There are many – and some are even controversial.

Before you can manage something, it must be measured or evaluated. Baseball is one sport that is constantly being measured. In baseball, (little league as well as professional), baseball coaches everywhere are measuring their team, AND their opponent’s team. Before the game, the coach evaluates their lineup of players, decides on the pitching staff, what order to make the batting order, etc.

Baseball is known for a daunting amount of statistics: runs, hits, walks, percentage on base, won-loss records, even how individual hitters stack up against individual pitchers on the opposing team. During the game, hits, walks, and outs are made, and runs are scored. The coach is constantly measuring and evaluating the situation as it unfolds, and will make changes on pitching, batting, pinch runners – everything related to their team – in order to win the game. By using these measurements – and any new information that is available – the coach can make adjustments accordingly.

That is how Management works. Management is how to interpret the data, statistics, and other information, evaluate the situation, make decisions, and then take action. Once the action begins, constant evaluation of the situation needs to occur to make sure the strategy is on the right track. If the strategy is working – great – the Credit Union can monitor the strategy to keep it on track. If not, adjustments may be made.

As in any discipline, experience and practice helps. ALM is no different. Over time, both the Credit Union’s measurement techniques and the art of management of the ALM process need to improve. However, it is better to understand and execute the basics well than know little about advanced ALM and execute them poorly.
ALM Measurements – the Basics
As mentioned previously, there are many ALM measurement techniques. Be aware there is no perfect ALM measurement. Some are very good however. Others have only limited use. Still others are controversial. It is important to pick the techniques the Credit Union will use wisely.

Appendix B gives a recap of the various ALM techniques, the pros and cons of each, and how they are calculated. For now, know that each are used for various measures of the Credit Union’s risks and returns, and these should be compared against both the financial targets of the Credit Union and the ALM policy limits.

Below are the basic ALM measurements. Each will be discussed.

1. Financial Statements (Balance Sheets and Income Statements)
The financial statements themselves are very good ALM measurements, especially when compared over time (past, present, and future). They can even be compared to peer groups and to the Credit Union’s budget. By analyzing the Credit Union’s financial statements, the reader can begin to spot trends. For example, if a large increase occurred in the Credit Union’s fixed rate mortgage loan portfolio, this could be either a good or bad trend depending on the characteristics of the loans as well as what other accounts are on the balance sheet.

2. CAMELS Ratios
CAMELS ratios (Capital, Asset quality, Management, Earnings, Liquidity, and Sensitivity to market risk) are very good ratios derived from the financial statements. They also can be measured for the past, present, and future, and can be compared to peer groups. The regulators use CAMELS ratios extensively in their regulation of the Credit Unioning industry. Note the M for Management has no particular ratio for its rating.

One of the main advantages of CAMELS ratios is that they are relatively easy to compute, compare, and understand. Each letter has several ratios that can be used. Another advantage of CAMELS ratios is what-ifs can be run for the future, and the Credit Union can see the potential effect on their future CAMELS ratios if a particular set of strategies were to be put into place. In this way, the Credit Union can take advantage of opportunities and avoid costly mistakes.
3. GAP
Not to be confused with GAAP (Generally Accepted Accounting Principles), GAP is an ALM technique that has fair to good value depending on which risk it is measuring for ALM. There are many types of GAP, but the main two are:

- Maturity Gap. This is the Gap of assets and liabilities maturing over time. It uses the cash flows of the principal of the instruments to see whether or not the Credit Union is in a good or bad liquidity position. Since it relies on cash flows, it is one measure of liquidity risk.

- Re-pricing Gap. This Gap looks at the timing of interest rates on when they could change on each side of the balance sheet. For example, the interest rate on Money Market Checking could change each month. Fixed rate auto loans (on the other side of the balance sheet), cannot re-price until the loan is paid off and a new loan is made. Thus, there exists a re-pricing gap because of the potential rate timing difference between the asset and liability side of the balance sheet. Re-pricing Gap is a fair measure of interest rate risk to earnings.

4. EVE (Economic Value of Equity) or NEV (Net Economic Value)
This ALM technique has received considerable attention recently, especially from the regulators. It can be a poor to very good technique depending on how it is used. EVE measures interest rate risk to capital.

The main thrust of EVE is to look at the change in capital as if the balance sheet was “fair valued.” Fair value can be dramatically different from book value depending on economic factors such as interest rates. For example, an investment with a book value of $1,000,000 may be only “worth” or fair valued at $950,000 if interest rates go up. The fair value of many assets may actually increase if interest rates go down.

EVE uses discounted cash flow techniques to approximate the fair value of the assets and liabilities. This is because the exact fair value is generally unknown or can change day to day in the market. This is one of the reasons why this technique is controversial.

Figure 7.1 shows a balance sheet with both book value and fair value. Note the Capital section of the balance sheet. Since capital is the residual of assets less liabilities, EVE is the capital of the balance sheet that has been fair valued. Since EVE has declined in Figure 7.1, the capital of the Credit Union could decline if rates rise. This is why the regulators look at EVE closely. If interest rates move, the EVE of the Credit Union could change in an unfavorable way – regardless of what was showing on the books. If the change is great, as indicated in Figure 7.1, there could be a large amount of interest rate risk to capital.
Credit Union Balance Sheet (in 000's)

<table>
<thead>
<tr>
<th>ASSET CATEGORY</th>
<th>BOOK AMOUNT</th>
<th>&quot;FAIR VALUE&quot; AMOUNT</th>
<th>LIABILITY CATEGORY</th>
<th>BOOK AMOUNT</th>
<th>&quot;FAIR VALUE&quot; AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>5,000</td>
<td>5,000</td>
<td>DDA's, Savings and MM Checking</td>
<td>40,000</td>
<td>41,000</td>
</tr>
<tr>
<td>Investments</td>
<td>26,000</td>
<td>24,000</td>
<td>CD's and IRA's</td>
<td>45,000</td>
<td>45,000</td>
</tr>
<tr>
<td>Loans</td>
<td>65,000</td>
<td>63,000</td>
<td>Total Deposits</td>
<td>85,000</td>
<td>86,000</td>
</tr>
<tr>
<td>Allowance for Loan Loss</td>
<td>-1,000</td>
<td>-1,000</td>
<td>FHLB advances</td>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Net Loans</td>
<td>64,000</td>
<td>62,000</td>
<td>Other Liabilities</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Stock</td>
<td></td>
<td></td>
<td>Total Deposits and Liabilities</td>
<td>89,000</td>
<td>90,000</td>
</tr>
<tr>
<td>Fixed Assets</td>
<td>4,000</td>
<td>4,000</td>
<td>Retained Earnings</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td>Other Assets</td>
<td>1,000</td>
<td>1,000</td>
<td>Year to Date Income</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Total Assets</td>
<td>100,000</td>
<td>96,000</td>
<td>Total Capital</td>
<td>11,000</td>
<td>6,000</td>
</tr>
</tbody>
</table>

Figure 7.1 Book balance sheet compared to a fair valued balance sheet.

5. **Income Simulations**

Income Simulations measure interest rate risk to earnings and are very good techniques for measuring this risk for the future. As the name implies, it simulates future income statements if certain items change. These items can include:

- Interest rates
- Growth
- Changes in the mix, or the composition of assets and liabilities
- Fees, charges, and other non-interest income and expense changes.

Income simulations are excellent at evaluating future strategies for the Credit Union and quantifying the potential risk of the strategies. Many CAMELS ratios can also be computed as a by-product of income simulations.
Time is Your Guide
Whatever measurement techniques are employed, it is important to use time. The Credit Union’s past, present, and future represents a continuous stream of time in which to analyze trends and plot strategies for the future.

Many ALM measurement systems stop at the present. They measure what the Credit Union’s ALM position is today, without regard to the future. Some also perform the past (a historical trend analysis) along with the present. This is a dangerous practice. It is similar to driving in your car when the only references you have is the rear view mirror and side windows. There would be no windshield to see what lies ahead. Only by using all of time (past, present, and future), can the Credit Union gain a complete understanding of its ALM position, and take action accordingly.

![ALM Process using Time - the Basics](image)

Figure 7.2 is a simple flowchart of measurement and management of the ALM process. Note the entire process begins with the goals of the Credit Union. Next, a balanced scorecard of measurements helps to evaluate the Credit Union’s current ALM position. Evaluating future ideas and strategies are “what-ifs” the Credit Union employs to see if ideas have merit. Once the strategies are implemented, then constant monitoring of the process occurs to make sure the strategies are “on track.”

An ALM policy – along with measurement guidelines - needs to be written for the Credit Union in order to guide the management of the ALM process. As we will discover in Chapter 8, an ALM Policy contains guidelines for the Credit Union’s goals and acceptable levels of risk. The policy also clearly outlines the objectives and roles of the Asset/Liability Committee or ALCO. The policy needs to be flexible to allow change.
The ALM Policy contains the “measurement” guidelines for the financial institution. The policies set up are reflective of history and help determine what is acceptable for the future. Establishing the policy limits is actually directed by the Credit Union’s board of directors. With the information provided by the ALCO, the ALM Policy is reviewed and finalized by the board. Policy limits are a reflection of the acceptable levels of risk. In addition, a reporting system should compare actual and projected risk positions to policy guidelines.

In conclusion, measurement quantifies the Credit Union’s key risk/return positions over time. Measurements are also easily incorporated into reports and graphs. The ALCO establishes the tolerance levels for key risk measurements. The key risk measurements could include, but are not limited to: Liquidity, Credit, Interest Rate Risk on Earnings, and Interest Rate Risk on Capital. Credit Union personnel develop strategies based on the measurement results. Management of ALM is the interpretation of all the information, including the ALM measurements, and then making decisions that help the Credit Union move forward.

How to use ALM Measurements – start of the Management of ALM

Once computed, ALM measurements are compared to financial targets and the ALM policy limits. Remember, ALM policy limits are the most restrictive. They represent the “line in the sand” that the Credit Union should not cross except in unusual circumstances. If the Credit Union does get near the ALM policy limit or “crosses the line”, it needs to have a strategy to get back on track.

Financial targets are the “normal operating range” the Credit Union normally sees in the measurements. Financial targets may be tied to the goals of the Credit Union, or they may simply be a range the Credit Union “can live with.” It is important to note that financial targets are usually different from the ALM policy limits.

To go back to a baseball analogy, if the ALM policy limits is a foul ball (because it is out of bounds), then the financial targets is the baseball field itself. The game of baseball is normally played on the field. The goal may be to get a hit inside the field, or to go for a homerun.

Figure 7.3 shows two simple CAMELS measurements - Capital to Assets and ROA Year to Date over time - and compared to both the financial targets of the Credit Union and the ALM policy limits. Since the ALCO (and the board of directors) can see the past, present, and future measurements, how they compare to targets and limits, and various alternative strategies of the future, they are better able to make decisions beneficial to the Credit Union. Note time is used as the guide, as well as comparisons to the targets. By making decisions, the Credit Union is managing the ALM process.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA YTD %</td>
<td>.79</td>
<td>.74</td>
<td>.87</td>
<td>.90</td>
<td>.96</td>
<td>&gt;.35</td>
<td>&gt;.8</td>
</tr>
<tr>
<td>Meet ALM Policy?</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Meet Financial Target?</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Capital to assets</td>
<td>7.93</td>
<td>8.49</td>
<td>9.19</td>
<td>9.58</td>
<td>10.48</td>
<td>&gt;7.0</td>
<td>8.0 to 12.0</td>
</tr>
<tr>
<td>Meet ALM Policy?</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Meet Financial Target?</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

Figure 7.3 Example of measurements compared to targets
ALM Reporting
One of the key functions of the ALCO is to discuss the ALM position of the Credit Union. The ALCO also directs strategies to keep the Credit Union on course, or correct the Credit Union’s ALM position. This is accomplished by an ALM measurement system to look at the risk and return position of the Credit Union.

The main points of ALM reporting are to spot trends, look for opportunities for the Credit Union, and test ideas for strategies for the future. Risk measures must also be compared to ALM policy limits to test whether the Credit Union is in compliance. If not, corrective action (in the form of an ALM strategy or a revision of a strategy) is necessary.

There is one general rule for ALM reporting: KEEP IT SIMPLE! It is required that all ALCO members have a good general understanding of Credit Union financial statements, CAMELS ratios, and basic ALM concepts. If not, further education is required. With this rule in mind, - color, graphs, etc. can all help in the explanation of the Credit Union’s ALM position. Appendices C and D give examples of ALM reports.

ALM Strategies
There are an unlimited number of ALM strategies that can be employed at a Credit Union. They can be balance sheet mix changes (such as more auto loans), rate changes (pricing), non-interest income (fee income changes), growth strategies, etc. “What-if” analysis is an excellent way to model these assumptions. The Credit Union staff can be an excellent resource to discover ideas for ALM strategies.

The general procedure for ALM strategies is to:

1. Review the historical to current financial position of the Credit Union. This may include looking at the financial statements, CAMELS and other ratios, and any other narrative or statistical information to get a true picture of the Credit Union up to the current month.

2. Review the historical to current risk position of the Credit Union. All of the main risks should be examined, and any trends noted.

3. Come up with ideas for strategies for the future.

4. Look at the projected financial position of the Credit Union. Basically, this is the same as the historical to current view, but now for the future. Note any trends that may affect the Credit Union.

5. Look at the projected risks. These are the four main risks as reviewed for history, but now for the future. Compare to the ALM policy to see if the projected strategy is within the risk guidelines of the Credit Union.

6. Document any assumptions and conclusions the ALCO made to the above strategies.

7. Take action! Make decisions and track the strategies over time.

8. Repeat the process each month, quarter, or as conditions change.

Using the agenda for the ALCO developed in Chapter 8, Appendix C shows a simple example of ALM reports, tying all of the concepts learned thus far.

In Chapter 10, we will walk through a practical example of the measurements using ALCO reports in Appendix C. Once the data is interpreted, the Credit Union can then take action in the form of strategies in order to maintain, modify, or improve the Credit Union’s ALM position.
Chapter 8: The Asset/Liability Policy

Key Points in this Chapter:
- The Asset/Liability Policy is an important tool to address risks vs. returns, and give the Credit Union a guideline for the Credit Union's ALM philosophy.
- The policy is approved by the board of directors, and should be reviewed annually.
- ALM Policy limits are usually “wider” than the Financial Targets set by the Credit Union’s Long Range Planning process.
- Monthly or quarterly the ALCO measures the Credit Union’s ALM position, and compares it to the ALM Policy. If necessary, corrective action is taken.

Definition of ALM as it Relates to the Asset Liability Policy
Asset/Liability Management refers to the overall control of the composition of balance sheet accounts in order to attain key objectives. Those key objectives are to meet the goals of the Credit Union while controlling various levels of risks. As we have seen in previous chapters, sometimes these objectives can be contrary to one another. In addition, many times one Credit Union's tolerance of risk is not the same as another. Therefore, these risk tolerances need to be properly communicated and defined in a policy statement.

For example, let’s say a Credit Union may wish to expand its brick-and-mortar branch network in order to better serve its members. This may be a great goal for most Credit Unions, but a Credit Union with severe credit problems and negative earnings would be taking on additional risk by expanding its branch network too quickly. The key point is to balance the member’s needs on the risk/return tradeoffs that face all strategies the Credit Union employs.

Who is Responsible?
The board of directors are ultimately responsible for defining what practices and levels of risks are acceptable. It accomplishes this by adopting policies and procedures that direct the management on how to make choices between risks and rewards. The ALM policy is a codification of those policies and procedures.

Policies can be developed in a variety of ways. The full board might, for instance, develop broad guidelines and directions. They could delegate responsibility for development of more detailed procedures in part of the policy to the ALCO. In other circumstances, the board might delegate to the management the drafting of the entire policy and procedures or rely on outside consultants. Whatever way proposed policies are developed, the board must approve them and is responsible for them.

In practice, the board of directors delegates the day-to-day duties of ALM to the ALCO. As such, the ALCO needs to be very familiar with, and fully understand the ALM policy and its guidelines. Chapter 9 will discuss the role of both the ALCO and the board of directors on what needs to be accomplished for the ALM process to be successful.

What Should Be In the ALM Policy?
The contents of the ALM Policy are often a source of debate between examination bodies such as the regulators, and the Credit Unions that have to abide by the parameters of the policy. While some Credit Unions tend to view the policy as a rope by which you can hang yourself, if a policy is written in the in the right context, the Credit Union’s policy can be a useful guideline to help you to meet the Credit Union’s goals, rather than hinder them.
In Appendix A, there is a sample Credit Union ALM policy. Although not meant to be the ultimate ALM policy for all Credit Unions, it does cover many of the major items to be included in a well-crafted policy.

One of the Credit Union’s objectives in an ALM policy is to keep it simple. An ALM policy should never be 144 pages long. This is far too detailed for most Credit Unions. Ten to twenty pages is more than enough for an ALM policy for most Credit Unions.

The ALM policy is composed of general guidelines, which clearly outline the objectives and roles of the ALCO. The policy should have stated quantitative ratios and calculations (measurements) which the board will use to determine if the risk/return levels of the institution are within acceptable parameters. It is recommended that you store the policy limits in the appendix of the policy. This way, you can quickly add or revise the policy limits as needed, without making changes to the body of the policy.

Remember - ALM is more than just interest rate risk, it involves all areas that impact the financial stability and performance of the Credit Union. Therefore, the policy should address the four main risks of the Credit Union: Liquidity Risk, Credit Risk, Interest Rate Risk on Earnings, and Interest Rate Risk on Capital.

Here are some tips on forming a good ALM policy:

1. Outline the role and duties of the board of directors and the ALCO, and who should be on the ALCO.
2. Provide for ongoing education for the board and the ALCO.
3. Address all risks, not just interest rate risk.
4. Place all measurements in an appendix to the policy. This way if any changes are to be made, they can be done in one place.
5. The measurements should be ranges (or a minimum or maximum), rather than an absolute number. For example, setting a minimum Capital to Asset ratio of 7% is better than saying you want a Capital to Asset ratio of 7%. On the later example, if you are at 7.25%, then you did not meet the Credit Union’s goal because it is not the same as the policy. Be very careful of the words you choose in the ALM policy.
6. When establishing a reporting mechanism for ALM, make sure the reports address all of the guidelines in the ALM policy. The reporting mechanism must be timely in order to make proper decisions.
7. Coordinate the reference of the ALM policy to other policies of the Credit Union (lending, investments, operations, etc.)
8. Make sure the ALM policy is stated as a guideline, not an absolute. Sooner or later, you may be in strict violation of one or more of provisions of the policy. This is because of unusual circumstances, or perhaps because the reporting period is early or late in the year. Address how the Credit Union will deal with these violations through corrective action.
**How Often You Should Revise the Policy**

The policy should be reviewed at least annually to ensure it remains adequate and consistent with the goals of the Credit Union. The policy should be revised when necessary to address changes in resources or the Credit Union’s operating environment. Numerous requests for exceptions to the policy - as evidenced of being outside of policy limits - are excellent indicators that a revision is necessary.

However, be very careful not to revise the policy too often. Numerous CEO’s and CFO’s have discussed changing their Credit Union’s policy guidelines. The reason was that they were going to be – or already were – in violation of the ALM policy limits. Nevertheless, in looking at the original policy limits, they appeared to be reasonable given the Credit Union’s circumstances. In these cases, the Credit Unions already had serious levels of the various risks, and the Credit Unions wanted to “mask” the real risk by just changing the policy limits! Thus, it makes sense to ask for an outside opinion from time to time just to see if the limits are reasonable.

Given the purpose of the policy, and the responsibility of the board of directors, it is necessary to insist any exceptions to policy should receive the approval of the board of directors. Frequent exceptions to the policy are red flags that practices are in place that deviate from the desire of the board of directors.

As matter of practice, the ALCO usually takes the lead and suggests changes to the ALM policy. From time to time, the examiners may also suggest changes to the policy. These changes must be formally approved by the Credit Union’s board of directors.
Chapter 9: Roles of the Board of Directors and the Asset/Liability Committee

Key Points in this Chapter:

- The Credit Union’s board of directors are ultimately responsible for the ALM policy and the safety and soundness of the Credit Union. Day to day duties are usually delegated to the Asset/Liability Committee, or ALCO.
- The ALCO is usually responsible for measuring and managing the ALM process, and reporting the results on a periodic basis to the board of directors. The guidelines for the ALM process can be found in the ALM Policy.
- Evaluating potential strategies through “what-ifs” are important, as well as tracking strategies that are already implemented.
- Proper ongoing education is important for all those involved with ALM.

Meeting the Credit Union’s Goals

You can have the best goals in the world, the best plan, the best idea, but you still need people to implement them. Just like a perfect golf swing, baseball swing, and a jump shot … it is the follow-through, which is the difference between a hit and a miss. Who is responsible for the follow-through of the ALM process? Who is responsible to make sure that the day-to-day strategic directives are carried out and implemented? Answer: The Asset/Liability Committee, or ALCO.

The ALCO is in charge of the issues related to how assets and liabilities will be deployed to promote safety and soundness and meet the Credit Union’s long-range plan. It is the link between the planning function and frontline management. The committee is typically composed of senior management and representatives from major Credit Union functions that are directly involved in the acquisition and employment of funds. Each member needs to understand the concept and purpose of ALM and his/her role on the committee. Figure 9.1 shows a typical make-up of the ALCO in a small and larger Credit Union. Although not meant to be an absolute, it is a guide of what other Credit Unions typically have on their ALCO.

<table>
<thead>
<tr>
<th>Smaller Credit Union</th>
<th>Larger Credit Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
<td>CEO or EVP</td>
</tr>
<tr>
<td>VP of Finance (CFO)</td>
<td>VP of Finance (CFO)</td>
</tr>
<tr>
<td>VP of Loans</td>
<td>VP of Loans</td>
</tr>
<tr>
<td>VP of Operations (Branches, operations)</td>
<td>VP of Operations</td>
</tr>
<tr>
<td>(these may be the four top officers of the Credit Union)</td>
<td>VP of Branch Operations</td>
</tr>
<tr>
<td></td>
<td>Controller</td>
</tr>
<tr>
<td></td>
<td>VP of Marketing</td>
</tr>
<tr>
<td></td>
<td>Chief Information Officer</td>
</tr>
<tr>
<td></td>
<td>VP of Investments</td>
</tr>
</tbody>
</table>

Figure 9.1 Examples of who from the Credit Union are typically on an ALCO
A common question: “should a board member of the Credit Union be on the ALCO?” The answer is: it depends. The purpose of having a board member on the ALCO is to act as a liaison between the board of directors and the ALCO. If the ALCO were regularly reporting results of ALM to the board of directors, then there would not necessarily need to have a reason to have a board member on the ALCO. In addition, many times the Credit Union struggles with a board member on the ALCO because the board member may not be 1) educated on the fine points of ALM, and/or 2) not involved with the day-to-day strategies of the Credit Union. Because of this, ALCO meetings spend a great deal of time explaining ALM terms and the details of the strategies to the one board member.

If the board member is knowledgeable enough on the subject of ALM to make a positive contribution, then yes, it may make sense to have that person on the ALCO. The experience and extra pair of eyes looking at the ALM process would be very valuable. In this case, the board member would be an asset by being on the ALCO.

However if a board member insists on being on the ALCO, and they are not “up to speed” on ALM or day to day Credit Union operations, then the Credit Union may have two ALCO meetings: one with the board member to explain the basics, and the second (without the board member) which looks at the detail of the ALM process.

**Frequency of Meetings**
The frequency of ALCO meetings depends on the complexity of the Credit Union’s balance sheet and current market conditions. The committee should meet with sufficient frequency so the timely corrective action can be taken on adverse variances in actual performance versus projected. The most common frequency for mid-size institutions is once a month, or for smaller Credit Unions, once a quarter.

From time to time special conditions may arise to necessitate additional meetings during the month or quarter. For example, a competitor may have made a bold move and may threaten the success of a current or future strategy. Alternatively, a major shift in interest rates may prompt a special meeting. For whatever the reason, the ALCO needs to be aware that decisions may need to be made quickly as conditions arise.
Sample Agenda
At each meeting, key members will report the impact of ALM strategies on the current performance of the institution. A typical agenda for an ALCO meeting is below. Sample reports are discussed in Chapter 10, and are given in Appendix C and D. Note: You should use the 80/20 rule: 20% of the ALCO’s time spent on the history and current situation of the Credit Union and 80% of time spent on projections, strategies and decisions that need to be made.

A. Minutes of Previous Meetings

B. Economic conditions (nationally and locally)
   - Any Rate changes since the last meeting
   - Economic Forecasts
   - Local market conditions affecting the Credit Union’s ALM position
   - Local competitive moves (for example a Credit Union competitor adding a branch, etc.)

C. Historical to Current – Financial Position and Risk Position
   - Review strategies that were implemented
   - Historical trends on Balance Sheet, Income Statement, Ratios and other information
   - Actual Financial Performance versus Budget
   - Comparison to peers
   - Balanced Scorecard Results
     - Financial Ratios, etc.
     - Actual Risk Measurements versus ALM Policy (Interest Rate Risk on Earnings, IRR on Capital, Credit, Liquidity)
     - Loan Loss Reserve Discussion (Adequacy)

D. Current to Projected
   - Review key assumptions used
   - Projected strategies – potential impact on the Credit Union
   - Trends on Balance Sheet, Income Statement, Ratios and other information
   - Comparison to peers
   - Balanced Scorecard Results current to projected
     - Financial Ratios, etc.
     - Actual Risk Measurements versus ALM Policy (Interest Rate Risk on Earnings, IRR on Capital, Credit, Liquidity)
     - Loan Loss Reserve Discussion (Adequacy)

E. Perform What-If Analysis on Projected Strategies

F. Special Topics
   - Examinations by the regulators, State agencies, etc.
As mentioned above, it is a good idea to have a mix of the Credit Union’s management on the ALCO. Appendices C and D give examples of various management personnel of the Credit Union. (See page C-2 for an example.) The minutes also show who is on the ALCO, and what their roles are at the Credit Union. Note the ALCO members divided the duties of the agenda above between them. In this way, there is no single member who “takes control” of the entire ALM process. Dividing the duties has an added benefit of educating the various members of the ALCO.

**Red Flags**

One goal of the ALCO meeting is to identify if the Credit Union is on the right path. Therefore, the ALCO should be aware of ratios or trends that may signal an existing or potential problem by analyzing the past, present, and future direction of the institution. A few of these red flags are:

- Changes in the level and trends of aggregate interest rate risk exposure
- Significant changes in Net Interest Income
- Not understanding/documenting key assumptions of the budget
- The inability of the measurement system to provide reports that quantify risk exposure
- Unexplainable variances to budget greater than 20%
- Frequent exceptions to the ALM Policy, Liquidity Policy, Investment Policy, and Lending Policy
- Improper tools to monitor or measure financial performance
- Rapid asset growth funded by wholesale, volatile liabilities, or brokered deposits
- Capital growth rate is less than asset growth rate
- Increasing levels of past-due and nonperforming loans, loan losses, interest earned not collected
- Annual net charge-offs that exceed the balance of allowance for loan loss
- Significant increases or decreases in the percent of long-term assets to total assets
- Aggressively seeking new deposits without having a place to profitably put the funds to work

The ALCO should be alert for the appearance of red flags, investigate the source of them further, and if necessary, develop action plans to address the issues.

**Action Plans and ALM Strategies**

The ALCO should have the necessary tools to develop alternative scenarios through “what-if” analysis. These scenarios should incorporate such variables as expected loan demand, investment opportunities, core deposit growth, regulatory changes, and varying interest rate assumptions. When these scenarios are completed, the committee can test the strategies for return and risk implications.
Lay out exactly what the Credit Union wants to accomplish, document the assumptions and expected results, and communicate the direction to all the individuals involved. Measure the results, and realign processes if the Credit Union starts to veer off-track. Make sure the Credit Union is moving steadily closer to its goals at a pace acceptable to the board and the marketplace.

The Role of the Board of Directors

To gain a better understanding of why financial institutions fail, the Office of the Comptroller of Currency studied selected national banks that failed during the 1980’s. The study showed that while poor economic conditions make it more difficult for a Credit Union to remain profitable, the policies and procedures adopted by the board of directors have a greater influence on whether a financial institution would succeed or fail. Improperly functioning boards of directors and management were the primary internal cause of problem and failed Credit Unions.

The board of directors must provide oversight to ensure the Credit Union operates in a safe and sound manner and risks to the institution are properly controlled. The board’s responsibilities include: keeping informed, hiring and retaining competent management, and overseeing business performance of the Credit Union. The board of directors also establishes policies in major areas, holds management accountable for implementing and monitoring those policies, and ensures the risks to the institution are properly managed.

If this sounds like a big job, it is. As you can see by the OCC study, the members of the board of directors are vital to the safety and soundness of the institution. Therefore, the board must be informed, and educate itself on a regular basis. Effective directors are alert for the appearance of “red flags,” which give rise to further inquiry.

Although the board may depend on management’s expertise to run daily operations, the board remains ultimately responsible for monitoring operations, financial plans, and levels of risks. The board can monitor the operations through management reports, but it must do more than merely accept and review these reports, it must be confident of their accuracy and reliability.

Effective directors should ensure that management provides adequate and timely financial data and analyses that can answer questions such as:

- Is management meeting the goals established in the planning process?
- Is the level of earnings consistent, or erratic?
- Do earnings result from the implementation of planned strategies, or from transactions that, while increasing short-term earnings, raise long-term risk?
- Does the institution have sufficient capital to support its risk profile and business strategies?
- Does the director have confidence the reports are accurate and provide a complete evaluation of the financial condition of the institution?
- Are the goals and plans consistent with the directors’ tolerance for risk?
Chapter 10: A Practical Example of ALM Measurement and Management

Key Points in this Chapter:

- The management process evaluates the measurements, strategies are monitored and new ones considered, and decisions are made.
- In the beginning, keep the ALM reporting process simple!
- If a strategy is being considered in ALM, “what-ifs” look at the risk vs. returns of the strategy. ALM tools greatly help in this process.
- There are unlimited examples of successes, as well as failures of Credit Union strategies. Many times if a missed opportunity or failure occurred, the ALCO did not properly measure and manage the ALM process.

Measurement and Management – Step by Step

In Chapter 4, we learned of the major steps in the ALM Process. This chapter is meant as a guide for checklist items 13 through 18 referred to in Chapter 4. In Chapter 7, we discussed the measurement and management of the ALM process, and presented basic ALM measurement techniques.

Specifically, let’s walk through a normal monthly or quarterly process by performing the measurements and discussing the appropriate potential management actions that may be necessary. Let’s keep it basic – more advanced measurement and management considerations are beyond the scope of this booklet. Appendix C contains basic ALM reports, and they will be used as a focal point of the measurements used. Refer to this appendix as we follow along.

Start with Goals

In Chapter 5, we discussed how to put together goals for the Credit Union. For our example, let’s assume the following were the top four goals of the Credit Union. The measurements of the goals are recapped below and are also shown by the financial targets in Appendix C.

Goals of the Credit Union:

1. Improve the safety and soundness of the Credit Union by increasing profitability and our capital adequacy position.
2. Grow in total market share as measured by the percentage of total assets compared to other local institutions.
3. Increase the percentage of our member base that uses the Credit Union as the primary financial institution.
4. Be one of the “Best Places to Work” in our area.

Note Goal #4 is not necessarily directly ALM related. This is a common practice among Credit Unions: to “blend” financial and non financial goals together to “round out” the purpose of the Credit Union as it moves ahead in the future to serve its members and provide a quality place of employment for its employees.
In addition, one could ask the question of whether Goal #2 is directly related to ALM. The answer is yes, because given the goal (and the measures), ALM strategies will help determine:

- what products the members could have
- the risks and potential limits of the products
- what is the term and pricing of the products

In Chapter 5, we learned that goals must be measurable, have a time dimension, and be reasonable. Below in Figure 10.1 is a simplified Balanced Scorecard for the goals. Note they contain the financial targets, the ALM policy limits from Appendix A (if applicable), and also non-financial goals. For the ALCO reports in Appendix C, the financial targets and ALM policy limits set in Goals #1 through #3 will be used to compare to our past, present, and future financial results.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Supports</th>
<th>Targets (Financial and Non Financial)</th>
<th>ALM Policy Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Assets Year to Date (ROA YTD)</td>
<td>1</td>
<td>&gt;.80%</td>
<td>&gt;.35%</td>
</tr>
<tr>
<td>Capital to assets Ratio</td>
<td>1</td>
<td>8.0% to 12.0%</td>
<td>&gt;7.0%</td>
</tr>
<tr>
<td>EVE to Assets Ratio</td>
<td>1</td>
<td>N/A</td>
<td>&gt;6.0%</td>
</tr>
<tr>
<td>Percentage of total assets of the Credit Union to total assets of the local market</td>
<td>2</td>
<td>&gt;6.0%</td>
<td>N/A</td>
</tr>
<tr>
<td>Percentage of the member base that has a transaction account</td>
<td>3</td>
<td>&gt;40%</td>
<td>N/A</td>
</tr>
<tr>
<td>Average number of products/services per member</td>
<td>3</td>
<td>&gt;2.5</td>
<td>N/A</td>
</tr>
<tr>
<td>Total employee turnover ratio</td>
<td>4</td>
<td>&lt;15%</td>
<td>N/A</td>
</tr>
<tr>
<td>Number of total education hours per employee per year</td>
<td>4</td>
<td>&gt;35</td>
<td>N/A</td>
</tr>
<tr>
<td>Average composite rating of an employee survey (1 to 5)</td>
<td>4</td>
<td>&gt;4.2</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Figure 10.1 Simple example of a Balanced Scorecard with targets and ALM policy limits

**Policy and Measurement System**

From the goals, we have the financial targets for the Credit Union. Once the ALM policy is in place, the Credit Union also has the ALM policy limits. Now the Credit Union has two frames of reference in order to evaluate whether the ALM strategies are working or not. Note there may be other ALM policy limits that are not shown in Figure 10.1. This is because the details of the risks and returns of various strategies can be measured, which is more detailed than the balanced scorecard above. Remember – the balance scorecard is the top-level view of the Credit Union. Many other measurements – targets and policy limits – are usually included in supplemental schedules such as the ALM reports.

The ALCO would have put in place a measurement system that makes sense for the Credit Union. Appendix E discusses the pros and cons of the various measurement systems. Be aware that whatever system the Credit Union chooses, it must show the past, present, and future position of the Credit Union. In addition – some of the better ALM systems do compute true balanced scorecard measures, since they can include non-financial data (such as turnover statistics on employees) as well as financial data.
The reports in Appendix C concentrate on ALM, and some of the financial targets shown above. Note the reports give a past, present, and future (projected) look at the Credit Union. Refer to this Appendix as you follow with ALCO meeting.

**Strategies to Keep the Credit Union on Track**

In Chapter 9, we discussed the various personnel on the ALCO, and how the duties should be distributed. Appendix C begins with the description of who is on the ALCO, and the minutes of the ALCO meeting.

During the ALCO meeting various ideas will come up in order to keep the current strategies going (because they are working), or to change or add new strategies to shift the projected course of action for the Credit Union.

A word of caution: If there are no ideas for strategies – this is a warning sign. Everyone on the ALCO needs to participate and share ideas in order for the ALM process to work effectively. If only one or two individuals come up with the ideas, the Credit Union may find itself missing opportunities to better serve the member base. The CEO and/or chair of the ALCO should foster an atmosphere of creativity within the ALCO. This will greatly help move the Credit Union forward to meeting their goals.

Page C-4 is a focal point of the ALM measurement system. All measurements show a color grade with green being OK, yellow indicating caution, and red meaning the measure is in violation of an ALM policy limit. Note the sections are as follows:

1. Upper Left – Financial position (Balance Sheet, Income Statement, Key CAMELS ratios)
2. Lower Left – Assumptions, Conclusions, and Decisions to be made.
3. Right side of the report – Four main risks of Credit, Liquidity, IRR on Earnings, and IRR on Capital.

The reader should be aware of the indicators of financial position and risk as shown. This is an easy-to-read glance at the ALM position of the Credit Union. Decisions that need to be made are on the same page. Page C-4 not only serves as a summary of the ALM reports shown in Appendix C, but also could be a valuable summary for the board of directors.

**Make Decisions and Execute Actions**

Once all the facts are analyzed, decisions need to be made about the course of action for the Credit Union. Note on page C-4 and C-8 that Liquidity Risk is projected to be beyond the Credit Union’s ALM policy limits. In addition, if the Credit Union only reported past to present, this fact may not have become known. This is why projecting ahead and looking at strategies into the future becomes so important. With this type of “early warning indicator”, the ALCO can spot trends – both good and bad – and make corrections if necessary.

For example, the ratio of Long Term Assets to Total Assets was projected to rise, the result of which could cause some liquidity concerns for the Credit Union. The ALCO needs to understand the underlying reasons for this, and how to take corrective action now.
Conclusions
The measurement and management of ALM is an important part of the entire ALM process. With the “walk-through” above, hopefully you can appreciate the effort involved. Over time, and with experience, the ALM process will become an integral part of the Credit Union’s operations. This was meant to be a basic look at the measurement and management of ALM.
Chapter 11: Conclusions

Key Points in this Chapter:
- Integrate ALM into the Financial Management Process – it works!
- Remember – ALM is not a cure all, but it does help the Credit Union reach its goals.
- The Credit Union needs to keep learning and adapting to the changing conditions ahead.
- Remember – It is the members’ money, and shareholders want a return!

ALM is Constantly Changing
In the last 20 years, Credit Unions have grown and changed dramatically. New products and services, new markets and locations, and the growth of credit unions have all changed the way Credit Unions are managed. The lifestyles of the member base of Credit Unions have also changed, forcing most Credit Unions to adopt new ways to approach the way members are served. Credit Unions are finding that ALM is an important part of this change, as the coordination of the products, services, delivery channels, and the financial statements become more complex over time.

Integrate ALM into Part of the Credit Union’s Financial Management Process
Long Range Planning, ALM, and the Budgeting Process all play a very important role in Credit Union management. The Credit Union needs to understand that although each discipline contains various purposes and steps, all three overlap, and therefore need to be coordinated.

Rather than view ALM as “a necessary evil”, the Credit Union should make ALM an everyday practice. Remember, every action or inaction the Credit Union takes eventually affects its ALM position. ALM needs to be constantly monitored to insure the past, present, and future financial health of the Credit Union is balanced with the needs of the members.

Both the ALCO and the board of directors should be educated on the role ALM has in the Credit Union, and this education needs to be constantly updated. The examiners will also place ALM high on their list of activities that the Credit Union should be paying attention. Someone in the Credit Union needs to keep abreast of trends in ALM techniques, and the regulations/practices coming from the examiners.

Keep the ALM Process Evolving – Have Fun at ALM!
This booklet has made light of the fact that many Credit Unions view ALM as a “useless exercise” or “necessary evil.” It does not have to be! The Goal Setting, Policy and Measurement System, and Strategies can be fun, challenging, and rewarding. There are a number of various strategies other financial institutions have employed – some of them very “non traditional.” Contests for the staff are an excellent way to get ideas for ALM strategies, and in turn better serve the members.

In examples below, notice a final checklist on the ALM process, and what a Credit Union should consider on what and when to perform various steps in the ALM process. There could be many modifications to the below steps, and some may be emphasized over others. Your Credit Union will need to customize it to the Credit Union’s particular situation. The step-by-step guideline is meant to be a starting point to help you manage your Credit Union’s ALM process.
### Goal Setting

<table>
<thead>
<tr>
<th>Major Steps:</th>
<th>Checklist</th>
<th>Suggested Frequency of Step</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>1. Are goals in line with the Mission, Vision, and Core Values of the Credit Union?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2. Can the goals be measured through a Balanced Scorecard or other measures?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3. Do they have a time dimension (starting time and/or ending time)?</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4. Can the goals be realistically attained given the time dimension above?</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
| 5. Perform “Strategic Positioning” at least 1-2 times a year to help with Goal Setting.  
   a) Key is to find the potential “sweet spot” of the Credit Union given the philosophy and goals established above.  
   b) Ingredients include a no growth, low, medium, high growth scenarios combined with asset/liability mix and rate changes) | X | X |

### Balanced Scorecard

<table>
<thead>
<tr>
<th>Major Steps:</th>
<th>Checklist</th>
<th>Suggested Frequency of Step</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
| 6. Has the Credit Union decided on the measurements that are important?  
   a) “A” measures total 6-12 in number.  
   b) “B” measures total an additional 10-20 and include many ALM measures.  
   c) Balanced Scorecard includes financial and non-financial measures. | X |
| 7. Are the measurements in line with the Credit Union’s goals? | X |
| 8. Can it be measured effectively and in a timely manner?  
   a) A measurement/tracking system is in place to help with the scorecard. | X | X |
| 9. If the Credit Union performs What-ifs, can the Balanced Scorecard be measured against the what-if? | X | X |
### Strategies

<table>
<thead>
<tr>
<th>Major Steps:</th>
<th>Checklist</th>
<th>Suggested Frequency of Step</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10. Come up with ideas for strategies:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) New or change to a product, service, and/or delivery channel.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) New or change in operations/policy of the Credit Union</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Reaction to an outside event: competition, economic, social, regulatory, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11. Sources for ideas:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) From determination of member needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) From the board, management and staff of the Credit Union</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Sources: from competition, local market conditions, other financial institution experiences, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>12. Does the Credit Union determine the feasibility of the idea?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Is it in alignment to the goals of the Credit Union? If no, decide if you want to continue.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Do we currently have or can we attain the resources necessary for the project?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Assign people and resources to the project.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) How should the idea be structured? (Terms, rate, expected target volume, timing of promotion, how long it should run, budget, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Run what-ifs on the impact of the project.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▶ Balanced Scorecard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▶ Financial Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▶ Risk measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Does it comply with regulations?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13. Approve the budget for the strategy.</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Major Steps: Checklist

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.</td>
<td>Launch the strategy.</td>
</tr>
<tr>
<td></td>
<td>a) Educate the necessary staff on the strategy.</td>
</tr>
<tr>
<td></td>
<td>b) Communications (if necessary to each group):</td>
</tr>
<tr>
<td></td>
<td>1) Members: Advertise on the Web, newsletter, promotional brochures, member statements, etc. if needed.</td>
</tr>
<tr>
<td></td>
<td>2) Board of Directors and staff.</td>
</tr>
<tr>
<td></td>
<td>3) Outside Groups (media, suppliers, etc.)</td>
</tr>
<tr>
<td></td>
<td>c) Implement the other details of the strategy.</td>
</tr>
<tr>
<td>15.</td>
<td>Track results and evaluate the strategy’s success.</td>
</tr>
<tr>
<td>16.</td>
<td>Modify the strategy if necessary. Perform steps above as needed.</td>
</tr>
</tbody>
</table>

### Suggested Frequency of Step

<table>
<thead>
<tr>
<th>Step</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Annually</td>
</tr>
<tr>
<td>Launch</td>
<td>Yes</td>
</tr>
<tr>
<td>Communication</td>
<td>Yes</td>
</tr>
<tr>
<td>Track</td>
<td>Yes</td>
</tr>
<tr>
<td>Modify</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Fiscal Year Plan (Alignment of Short Term Goals and Strategies)

<table>
<thead>
<tr>
<th>Major Steps:</th>
<th>Checklist</th>
<th>Suggested Frequency of Step</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>17.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>20. Measures for the Fiscal Year Plan</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
### Periodic Measurement/Reporting Mechanism

<table>
<thead>
<tr>
<th>Major Steps:</th>
<th>Checklist</th>
<th>Suggested Frequency of Step</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>21. Establish a periodic reporting on the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Balanced Scorecard – A and B measures</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>b) ALM Scorecard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Financial Position and Risk (including CAMELS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Budget vs. Actual (Balance Sheet and Income Statement)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Compare to Peer Groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Compliance/Regulatory Reporting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Strategies – How well the progress of strategies are to plan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Analyze variances to the above.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>23. Suggest changes in course of action; modify any of the above if deemed necessary.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Remember - It is the Members And Shareholders’ Money!**

Finally, remember that the balance sheet of the Credit Union is simply an inventory of the member’s financial resources the Credit Union serves. In many cases, individual member accounts may represent the life savings or total assets of that particular member. The employees, management, and board of directors are simply “safekeeping” the assets and liabilities, and should do the best to optimize and leverage what the members have entrusted to the Credit Union. Credit Union shareholders expect – and deserve – a fair return for their investment. ALM is just the subject to accomplish this goal.

Hopefully you have found this booklet to be informative and practical. Many checklists and examples are included to keep the subject useful to your Credit Union. Use these as the Credit Union sees best. Best of luck in your practice of ALM in your Credit Union.