

The Importance of Auditing the Asset/Liability Management Process

By Darnell Canada

On June 30, 2004, Alan Greenspan and the Federal Open Markets Committee (FOMC) raised the targeted fed funds rate for the first time since May 2000 and officially set off the next rising rate cycle. Although market indicators suggest that future increases in the funds rate will likely come at a "measured pace," the wait for higher rates has effectively ended.

Many budgets for 2004 and 2005 forecast tighter margins in a flat or falling interest-rate environment. Accordingly, earnings levels are expected to decline in the absence of sufficient earning asset growth and/or improvements in other nonmargin revenues. Understandably, not many bankers are enamored with the idea of using current capital to grow assets with loan rates in the five percent to six percent range and investment yields three to four percent. It is no surprise that bank executives have been praying for this rising-rate scenario to arrive.

This article will provide guidance to help you ensure your asset/liability management committee (ALCO) is both prepared and well equipped to handle the difficulties of managing this as well as any other interest rate environment.

Why Is the ALM Audit Important?

While a rising-rate scenario will likely prove more favorable over the long term, community banking institutions (hereafter referred to as banks) should be cautious and look for trapdoors that could appear as this new rate cycle continues to evolve. ALCOs would be wise to examine more closely the overall position of their balance sheets to identify and quantify the hidden risks in this scenario, which if left unattended could be analogous to walking through the minefield carelessly after the war has been declared over.

Margins May Still Narrow

For many banks, margins may initially narrow regardless of the direction in which rates move. Interest-rate floors are likely in the money. As a result, variable-rate loans will act like fixed-rate loans until market-rate levels break through these thresholds. In addition, the competitive environment has kept origination rates on new loans well below the weighted-average coupon on existing loan portfolios. In some cases, origination rates will have to increase 100 basis points ("bps") before reaching a break-even point. What does this mean? Funding costs may begin to rise in advance of asset yields. Therefore, strong growth rates will still be necessary to achieve higher profits. Given the slope of the yield curve, the cost of buying protection against rising rates remains high with little likelihood of collecting on the insurance.

What Will the Shape of the Yield Curve Be?

Intermediate and long-term rates continue to be highly volatile. However, the slope of the yield curve remains fairly steep from a historical perspective. What will happen if, as the FOMC tightens monetary policy, the yield curve flattens (short-term rates rise more than long-term rates)? Short-term funding (including nonmaturity deposits) costs may rise faster than any benefit is realized on the reinvestment of asset cash flows. The result: Wider margins will be delayed for a longer period of time than many banks' models predict. Note: recent initial shifts in interest rates support the notion of a flatter yield curve. Despite three rate hikes by the FOMC, long-term rates have declined.

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Loans May Continue to Prepay/Modify As Rates Rise

Be careful when originating floating-rate loans. Similar to the way that fixed-rate borrowers have forced you to rewrite their deals as rates have fallen, floating-rate borrowers may find it more beneficial to fix those loans as rates continue to rise. This would present an economic benefit if these loans remain with your bank, but how can you be assured that competitive pricing won't lure your customer(s) elsewhere? Remember, prepayment penalties should be applied whenever possible, even on variable-rate loans.

A Shift in Deposit Mix May Arise

Don't be surprised if the CD customers that shifted their money into savings and money-market deposit accounts shift back into CDs when the price is right. We've noticed that this trend has already begun to unfold for some banks, creating an even greater current earnings challenge.

Also, CD customers (especially IRA customers) have started to extend their maturities (three to five years) and take advantage of the bank's highest-yielding products. While this may appear to present a potential benefit since long-term CDs imply money is locked in for a sustained period of time, it is important to recognize that, at today's current low rate levels, in most cases the cost of early withdrawal is relatively immaterial. Should rates rise and these CDs become "broken," the bank will have paid a three- to five-year rate on what will have turned out to be a much shorter-term deposit. Again, this would delay the potential earnings benefits in a rising-rate scenario.

A Potential Liquidity Crunch?

Some banks could see deposit balances decline if rates rise and depositors flee to other, more attractive nonbank investment alternatives. Should this worst-case scenario unfold, liquidity levels could be squeezed at a time when the economic environment presents more opportunities for asset growth. For banks that have seen borrowing levels increase in the current environment, contingency plans should be put in place now to ensure that funding constraints do not restrict the potential for earnings growth in the future.

Collateral Values Will Deteriorate

Some banks have leveraged into the investment portfolio to supplant a soft lending market. For these banks, liquidity levels may have improved—assuming the investments can be used as collateral at the Federal Home Loan Bank (FHLB) or in the repo market. As you know, the fair value of these assets will decrease as interest rates rise. Depending on the mix of investments, this could have a meaningful impact on future liquidity levels (that is, borrowing capacity).

Can Deposit Rates Be Lagged As Much As the Model Assumes?

Should liquidity get squeezed, banks could find themselves pricing more aggressively to keep existing deposit customers as well as to attract new ones. In many markets, current CD rates are well below (50 to 100 bps) alternative wholesale funding resources. Should market rates rise, bank CD rates could be forced to increase at a speedier pace. To assume the bank will increase CD rates 100 to 150 bps, as many bank models do, will likely understate the impact of deposit pricing pressures in a rising-rate scenario. Increasing CD rates 200 bps, in fact, may not be enough.

Banks shouldn't be surprised if CD rates need to be increased more significantly. It's a good idea to plan your defensive strategies now to minimize this risk.

Ignorance Is Bliss

All jokes aside, too often community banking institutions use the asset/liability management (ALM) audit merely to make certain the model's financial data is valid and, consequently, view this project inappropriately as another futile exercise required to satisfy their regulators. This audit can have more serious implications than many bank executives acknowledge. As implied in the few examples above, an ALM process that is flawed in its capacity to identify and address all the risks, both obvious and unforeseen, could be very costly to your bank's future performance.

It is in the best interest for even the highest-performing institutions to reassess their process continuously to ensure ALCO can clearly identify the key business risks that may affect their perception of the bank's risk/return makeup. Past performance is behind us. Future performance will

be determined by the quality and completeness of the information ALCO uses to develop and discuss current strategy alternatives.

Key Elements to Review in the ALM Function

An effective audit of the ALM function will be comprised of more than an assessment of your A/L model. It will include an examination and feedback on each aspect of the ALM process to ensure ALCO members are provided with all the tools and capabilities necessary to affect balance-sheet performance positively. These include the role of the board and board policies, the A/L model, analysis and reporting and ALCO's agenda/discussions.

The Role of the Board and Board Policies

The ALM process begins with the board and its related risk-management policies, because the board lays the groundwork for the manner in which the bank may operate. Every business strategy involves an evaluation of risk versus return. And every business has a different tolerance for low-, moderate- or high-risk strategies. It is the board's responsibility to establish these thresholds for risk and define the parameters within which the bank may accept risk. It is the responsibility of senior management to develop policies that:

- reflect the bank's business objectives and operative point of view;
- establish internal systems and controls to ensure board-approved risk thresholds are not violated without reason and/or approval; and
- ensure the enforcement of those policies.

Board policies should be consistent. In our consulting practice, we often find conflicting statements within ALM policies, which obscure the bank's position on various risk-management issues. For example, it is not uncommon for the liquidity and funds management policy to discuss liquidity in the context of measuring and managing the bank's cash and collateral position. The investment policy, on the other hand, might discuss liquidity exclusively in the context of cash flow and/or Financial Accounting Standards Board Statement No. 115, "Accounting for Certain Investments in Debt and

Equity Securities" (FAS-115), classification (available for sale versus held to maturity versus trading); variables that may have no bearing on the bank's ability to readily and affordably access cash.

Board policies should define roles and delegate responsibility/authority to appropriate bank personnel.

Finally, the board should review and approve the policies periodically (annually, at a minimum) since business objectives and/or tolerances for risk may change.

The A/L Model

For ALM purposes, the A/L model should be used to measure both short-term and long-term interest rate risk rather than to perform ongoing budget analysis. ALCO's primary objective in this regard is to identify the level of interest rate risk embedded within the existing mix of assets and liabilities. Growth/budget models should come secondary to a no-growth model that assumes current cash flow and repricing variables react to market. The net-interest-income effect of growth inherently results in reduced levels of earnings exposure (assuming growth is "realized" at a positive spread) and, therefore, potentially compromises ALCO's ability to assess this risk. This no-growth approach to interest rate-risk modeling allows the bank to:

- isolate the effect of its plan on its interest rate-risk position;
- maintain a comparable historical track record (for changes in the interest rate-risk position) that is independent of budget and economic forecasts, which are not constants; and
- provide a more complete basis for current strategy development, which should help address more pragmatic issues: How should the bank grow? Is the current growth strategy appropriate given the prevailing risk profile?

Also, the level of risk/volatility associated with the existing balance sheet should be gauged against a range of reasonable and plausible interest rate scenarios. In this context, the interest rate-risk analysis should examine the balance sheet under rates up/down scenarios that are neither too modest (for example, -100 bps) nor too extreme (for example, +400 bps).

While 2001 reminded us that interest rates can move rapidly, shock scenarios are not common. Even dur-

ing that period of dramatically declining rates, it took four months for the targeted fed funds rate to fall 200 bps (from 6.75 percent to 4.75 percent) and another six months to fall the next 200 bps. Interest rate scenarios should not be “shocked” in the most literal sense of the word. Models should reflect a ramp in rates (that is, over six to 12 months) that are then maintained over the remainder of the simulation horizon. Using this approach, you will produce simulation results that show the effect of both a gradual change in rates (year 1) and a shocked environment (year 2 and beyond).

We recommend these modeling methodologies for ALCO’s regular core analysis. To better understand the impact of other important variables, the model may be run under alternative scenarios. For instance, given the current steep yield curve and low level of rates, a nonparallel yield curve shift and/or a more extreme rising-rate scenario (for example, +400 bps) may present valuable information to ALCO.

Data Sources and Input Methodologies. In this age of technological advancements, there should be very little manual entry of data. Cash flow and repricing information should be retrievable from your operating/accounting systems. Your model should accommodate data downloads to minimize errors in data entry and make the modeling process more efficient.

Don’t believe it if your data processor tells you the information can’t be accessed. Nor should you accept a modeling system that is incapable of processing *all* of the information necessary to project cash flow and repricing reasonably. Remember that what goes in must come out. Make sure your model cannot be mistaken for a garbage disposal.

Category Structure. The model’s category structure should be sufficiently detailed to capture the underlying cash flow and repricing dynamics of each A/L class as well as interest rate derivative transactions (swaps, caps/floors, collars, *etc.*). In general, each portfolio (investments, loans, deposits and borrowings) should be broken down by type, fixed/variable and repricing characteristics (reprice frequency and index). Depending on portfolio makeup, your model may need to differentiate some categories by cap/floor levels or prepayment/call propensity.

Assumptions

The strength of your model will largely depend on the strength of the assumptions employed. Should your model have flawed assumptions, ALCO receives flawed information and, therefore, is at risk of making poor decisions. It is important for key personnel in lending, treasury and retail to be committed to providing well-thought-out and defensible assumptions for loan originations, investment strategy, wholesale funding strategies and deposit activity (including expectations for pricing as rates rise and fall).

The option risk embedded in various assets and liabilities should be examined and evaluated at the instrument level for every scenario tested. In many cases, a third-party resource will be the best alternative for estimating cash flow variability for investments and borrowings. If possible, the bank should develop an internal model to gauge and predict changes in prepayment speeds for the loan portfolio rather than using national/regional averages.

Regulators are especially interested in the assumptions for nonmaturity deposits. Your A/L model should distinguish between core and non-core balances and also reflect the circumstances under which attrition might materialize.

Assumptions should be reevaluated periodically (quarterly, at a minimum), documented in detail and accompanied by supporting information. In some cases, it may be valuable to run your model under different assumptions to stress-test the model’s sensitivity to specific variables.

Contrary to popular belief, regulatory examiners do not look to discredit your assumptions. Their primary objective is to challenge appropriately your rationale and support for your assumptions. To the degree that your modeling is outsourced, they should question the extent to which you control the assumptions employed. Be well prepared. It’s your best defense.

Analysis and Reporting

The strength of ALCO’s strategy development will depend largely on the nature of the information that

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is prepared to delineate the balance sheet’s current position. While the reporting package prepared for ALCO should provide a “state of the bank” overview, the bank should be careful not to create a set of reports that are more budget summary than risk measurement and analysis. ALCO needs to reflect on the bank’s potential for meeting or exceeding budgeted performance goals. However, the committee’s focus should be on affecting future performance, not discussing past performance.

A solid ALCO package will include schedules that provide a clear and concise picture of the bank’s present liquidity, interest rate risk and capital positions (Exhibit 1).

In addition, the reporting package should include an executive summary that explains and provides an assessment of each risk component as well as a synopsis of the prevailing economic situation (national and/or local) and current interest rate levels.

There can be a delicate balance between providing ALCO with too little or too much analysis. The committee needs to understand the balance sheet’s dynamic fully. However, too much information can lead to “analysis paralysis” and cause ALCO to spend too much time reviewing the numbers and not enough time discussing key business issues and appropriate strategy.

ALCO’s Agenda/Discussions

All roads should lead to ALCO as much as they do Rome. Top performing banks will have a committee led by the CFO and/or CEO and comprised of

senior personnel in each of the bank’s key business areas: treasury, lending (commercial, residential and consumer), retail and marketing. While each division may have its own specific goals and agenda, collectively, they should be consistent and flexible enough to work toward the common purpose of strengthening the overall performance of the organization.

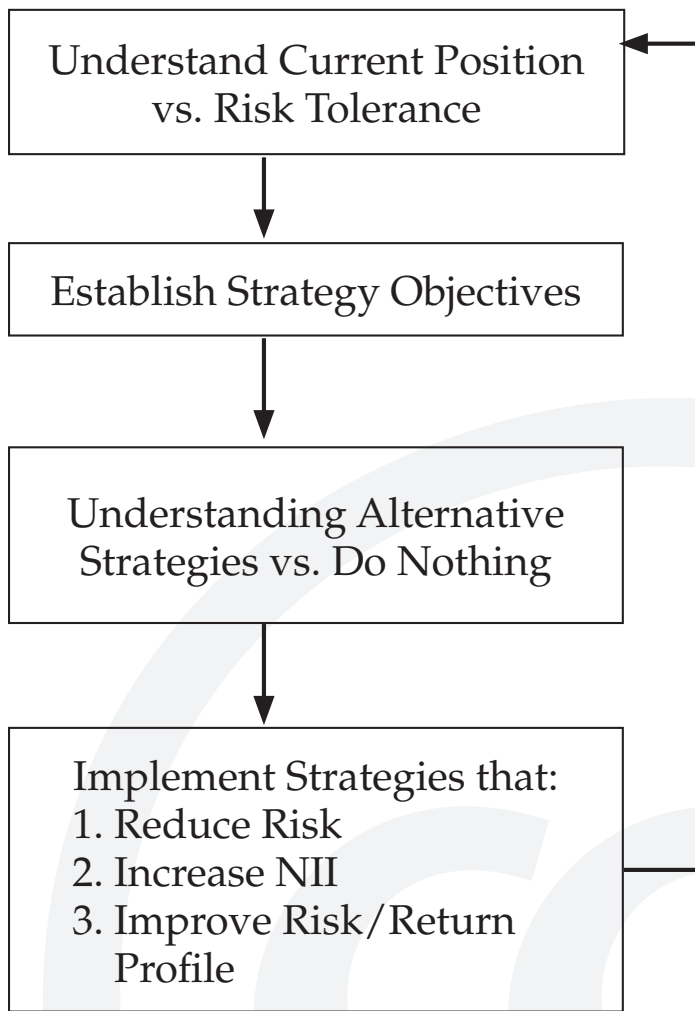
ALCO meetings should be a forum for open dialogue in order to promote active participation from all parties, sufficient sharing of information and a communal approach to strategy development and decision-making. Too often the organizational hierarchy becomes a hindrance to the ALCO process. There is a risk to one or two persons controlling the dialogue and decisions because it dampens the spirit of other committee members, can cause resentment or apathy and can dissuade objectivity and cooperation. The result: potentially poor decisions.

As already stated, ALCO’s first objective should be to understand completely the overall position of the current balance sheet and to identify the key business issues. An emphasis should then be placed on establishing objectives either to reduce risk, to enhance earnings or both. Your potential strategies will be considered in the context of how well they satisfy your objectives and better position the balance sheet. Whenever possible, decisions should be made at the meeting; responsibilities/action items should be delegated to appropriate personnel; and strategies should be implemented before balance-sheet or economic conditions change (Exhibit 2).

Exhibit 1: ALCO Reporting Should Cover Liquidity, Interest Rate Risk and Capital

Liquidity	<ul style="list-style-type: none"> ■ Ability to readily access funding (net cash and collateral position) ■ Complete mix of available funding resources and conditions ■ Forecast for net funding needs/excesses <p>The first two items will illustrate the bank’s current liquidity position. Item three should then drive deposit and loan pricing decisions as well as investment strategy.</p>
Interest-Rate Risk	<ul style="list-style-type: none"> ■ Near term (one to two years) margin/earnings sensitivity to changing interest rates ■ Key interest-rate-risk exposure factors (mismatch risk, yield-curve risk, option risk, or basis risk) ■ Long-term structural position <p>The first two items will help ALCO understand not only the extent to which earnings may be exposed to interest rates in various scenarios but also the key components that influence margin sensitivity. Item three will indicate the long-term economic risks embedded in the balance sheet and the degree to which optionality might affect earnings over a longer-term horizon.</p>
Capital	<ul style="list-style-type: none"> ■ Available growth capacity given current capital levels ■ Capacity to absorb loss given current capital levels

Exhibit 2 Summary of the ALCO Process



Balance-sheet strategies should be developed and considered based upon ALCO's comfort level with the current risk position versus board-established risk tolerances and independent of the interest rate forecast. For

example, securities purchased in the current environment have a strong likelihood of showing unrealized losses given the heightened probability of rising rates. However, can your balance sheet absorb the cost of sitting on the sidelines, especially if loan growth remains soft and/or pricing points are too low to accept the credit risk?

When appropriate, strategies should be modeled in advance of execution. They should always be documented in some fashion, identifying both the expected results and potential risks.

While the board should be kept abreast of the decisions that ALCO has made and informed of the rationale, it is not its role to approve specific strategies that are already authorized by policy.

Conclusion

Wasn't it Forest Gump who said, "ALCO is as ALCO does?" Ultimately, the strength of any ALM process is going to be determined by the bank's commitment and devotion to making ALCO meetings meaningful and productive. This commitment needs to start at the top and work its way down throughout the organization.

As balance sheet activities become more complex and diverse, it will be more difficult to strengthen earnings without accepting more risks. Make the commitment to ensure your ALM process allows the ALCO to manage these risks effectively. Reevaluate the effectiveness of your risk-management system based upon its ability to provide your management team with the means to articulate and support its belief in the bank's current risk position (both short and long term); the extent to which various components contribute to or affect risk; and the expected risk/reward implications of potential strategies.

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