

Reinventing Your ALCO Process: Pricing and Growing Your Assets for Maximum Financial Return

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Let's face the bad news first. You are in a business in which your customers know that most of the products you sell are commodities. You compete as price takers in most of your markets. Your products—including loans (especially to the highest quality credits), checking accounts, money market accounts, and various savings accounts—are all offered by a host of competing depository and non-depository financial institutions. In fact, a consumer can get most of what you produce from many non-financial firms that simply serve as brokers competing for the retail point of sale.

Now for the good news: there are ways to design pricing and growth strategies to counteract the forces of competition. Consider the following steps to help improve your odds of generating enough profit to satisfy the ROE requirements of investors in your company.

Step 1: Identify well-priced loans... AT THE MARGIN.

The primary focus of your retail pricing decisions should be to: (1) maximize the revenue of growing your balance sheet AT THE MARGIN, and (2) minimize the cost of funding your balance sheet AT THE MARGIN.

Why price at the margin? Low-cost providers are setting the clearing prices in the financial services sector, which is a commodity market. If you attempt to charge a premium price for your products, demand will quickly decrease. If you attempt to recover what you feel are your "required average costs of production," you will effectively price yourself out of the market, and your customers will find a lower priced alternative.

This does not mean, however, that smaller financial institutions have to lose all of their competitive advantages to larger firms. Fortunately, you can reduce costs by outsourcing various parts of the production process. And, you can use a variety of tactics to segment your markets and differentiate your products to find and exploit less price-sensitive customers.

Step 2: Integrate retail pricing with your income targets.

The next step is to establish the volume of loan originations you need to drive required income growth to your bottom line. Most institutions will identify their best-priced loans as those they can sell at a premium in the commodity markets. (Typically these are certain commercial and consumer loans.) In these markets, their prices impact loan demand, and they become a price-setter.

The trouble arises when the institution has to reduce the price on its premium loans to increase originations and, in turn, increase net income. As marginal revenue declines on the premium loans, some other loan category may become the best-priced alternative. And, much to the chagrin of the anti-fixed-rate mortgage crowd, this process may result in the need to portfolio well priced floating-rate mortgages in order to meet the income targets.

To identify these price/demand relationships as they relate to income targets, you'll want to consider the following cash flows when you make your marginal pricing decisions:

- Maturing cash flows from existing balance sheet items
- New originations of assets and liabilities
- Assets and liabilities that are shifting within the balance sheet

Step 3: Target Your ROE

To target your ROE, first target the level of profitability you wish to achieve—either with respect to a desired ROE or a desired amount of earnings growth. This will give you some idea about the level of balance sheet growth you'll need to achieve your targeted profitability. You can hold any assumptions about the levels of non-interest income and operating expenses constant, at least until you make some determination about balance sheet growth and composition.

Initially, you won't have to be concerned about the constraints that liquidity, interest-rate risk, and capital will place on your earnings capacity. These concerns should be addressed in the context of a dynamic simulation modeling effort. In fact, I'm assuming you will come to your ALCO pricing discussion with information regarding maturing cash flows and a list of your institution's sources and uses of funds—that you will have some idea about the size of the funding gap facing your institution.

Before you plan your investments or fine-tune your exposure to interest-rate risk, **PRICE YOUR RETAIL PRODUCTS FIRST!!!** Because most financial institutions are going to win or lose their battle for profitability in the retail markets, you need to know the volume of loan and deposit origination activity that you'll have to achieve.

For instance, you know that $ROE = ROA \times \text{Leverage}$. If you've already reached your desired capital-to-assets ratio of say, 6.67%, your leverage ratio is 15 to 1. If your ROA is 1.0%, the resulting ROE is 15%. Your balance sheet will have to grow by a rate equaling ROE net of dividends.

$$\text{Growth Rate} = ROE * (1 - D)$$

If, in this case, the dividend pay-out was 33%, your balance sheet would have to grow by 10% in order to achieve the targeted 15% ROE. If you haven't reached your desired capital ratio, you may target a growth rate that is greater than your ROE. And if for any reason you decide to target a lower level of profitability, you will curtail your need to grow your retail business. I'm not going to start preaching about the long-term required rate of ROE being 12% to 15%, at least not now. Just start your pricing process by targeting some level of profitability.

Step 4: Force as Much Growth as You Can Through Loans

During the pricing process, price your retail loans on a risk- and cost-adjusted basis with respect to wholesale investment alternatives. This will ensure that the marginal revenue of the loans you originate equals the marginal revenue of their wholesale equivalent. If you need them, investments will take up the necessary slack to generate the required growth to maximize revenue at the margin.

Step 5: Target Your Net Income

In addition to establishing an ROE target, you might also target a dollar growth of net income. Since $ROE = \text{Net Income} / \text{Equity}$, you can simply focus on the numerator of the ratio. I prefer this particular approach when my ROE is below the targeted ROE, and I'll be targeting either quarterly or annual increments to income in order to get to the target.

Divide this net income number by an assumed net interest spread that could be expected on the marginal growth, and you get the volume of retail loan originations required to generate this net income figure. Thereafter, the pricing process is identical to the "ROE targeted" approach. For instance, suppose you are looking for a \$200,000 increase in net income next year. You expect that the average yield on new loan originations, net of the cost of funding, will be 2.0%. Dividing \$200,000 by 2.0% gives you \$10,000,000 in average loan balances required to generate this net income for the year.

$$\text{Loans} = \text{Net Income} / \text{Spread}$$

$$\text{Loans} = \$200,000 / 2\% = \$10,000,000$$

If you originate loans equally throughout the year, you'll have to originate \$20,000,000 in loans to have an average of \$10,000,000 working for you, assuming loan growth was flat in the prior year. If there was significant growth in the prior year, you won't need quite as much loan growth this year. That's because the amount of loans at the end of the prior year exceeds average loans for that year, carrying some loan income momentum into the current year. For now, we'll assume Community Sample Bank needs to grow loans gradually by \$20,000,000 this year to hit its income targets.

Targeting Net Income – A Case Study

Let's review a case study of the management of Community Sample Bank pleading its case before its board of directors. The dialogue goes something like this:

“We made \$3,150,000 in profits before taxes last year. Our ROE, however, was way below potential. We need a 15% annual increase in income until we get our ROE where it needs to be.”

“So, we need to increase our income by 15% of \$3,150,000, or \$472,500. We could do that by increasing fees, but it would be tough in a commodity business. How about grabbing more income by simply growing the bank?”

“How much growth do we require if we can generate loan margins of 2%? That’s our additional net income target of \$472,500, divided by .02, or \$23,600,000. Assuming even growth throughout the year, we’ll need a total of \$47,200,000 in loan growth to average \$23,600,000.”

“\$47,200,000... that’s NET growth, after taking maturing cash flows into account. That incorporates scheduled maturities, amortization, and unscheduled payments. Let’s estimate maturities, amortization, and prepayments by each loan category over the next year. Oh boy, we’ll need \$106,000,000 in loan originations to get \$47,200,000 in net growth. How do we price these loans that we need to produce?”

Step 6: Price Your Loans

We’ll now assume that you have reviewed your loan categories and their respective volumes of maturing cash flows. We’ll also assume growth rates for each loan category.

Community Sample Bank has distilled its review of the consumer loan category into Table 1. The bank is projecting to originate \$1,920,000 of consumer loans next month to “A” credit borrowers at a rate of 4.55%. The bank is pricing the consumer loans assuming they have an average duration of approximately 2.5 years.

Table 1. Consumer Loan Category Summary

Maturing Cash Flows Per Period	Projected Originations Per Period	Rate on Projected Originations	Retail Equivalent (Risk & Cost Adjusted Bogey)	Wholesale Alternative Investment	Spread to Retail Equivalent
\$1,420,000	\$1,920,000	4.55%	3.60%	3.05%	.95%

Table 2 outlines the risk and cost-adjustments required in the pricing process. The wholesale equivalent security yield (asset-backed security) is 3.05%. After adjusting for incremental credit risks of targeted customers and incremental costs associated with this approximate volume of origination, the retail equivalent yield required on loans is 3.60%. Community Sample Bank now knows that the consumer loans projected for origination are “well-priced” (i.e., priced at a positive spread (95 basis points) to the retail equivalent yield. If this spread wasn’t positive, we’d have to ask why they would be planning to originate loans at a yield that wouldn’t cover their risks and costs?

Table 2. Retail Equivalent Rate

Wholesale Equivalent Rate	3.05
Credit Risk Adjustment	.20
Service Cost Adjustment	.30
Retail Equivalent Rate	3.60

Let's assume that the bank has determined that of the \$47,250,000 net increase in total loans, it will assign 18% of the required increase to the consumer loan portfolio. That's 18% times \$47,250,000, which is \$8,505,000 for the year or \$708,750 for the month. Adding \$708,750 of required growth to \$1,420,000 in maturing cash flows equals required total originations of \$2,128,750. The projected origination volume of \$1,920,000 at a rate of 4.55% falls \$208,750 short of this target. We arrive at this projected volume of loan originations by conferring with your loan officers and getting some idea of the volume of originations that they really expect to book at that rate of 4.55%.

At this point, we should conduct a little marginal pricing analysis (Table 3) to assess just how much of a price drop I could afford on the projected \$1,920,000 in loan originations, and still break even with the retail equivalent rate of 3.60%.

Not much, as it turns out. Using marginal pricing analysis, we see that by dropping the rate by a mere nine basis points to 4.46%, the marginal yield drops to 3.63%, which is just slightly above the break-even to the retail equivalent. So, what do you do?

Table 3. Marginal Effect of Increasing Consumer Loan Balances

Index: 2-Year U.S. Treasury
Rate: 2.32%

Strategy	Balance	Spread	Rate	Inc/Exp
Base Strategy	1,920,000	2.23%	4.55%	87,360
Alternative Strategy	2,128,750	2.14%	4.46%	94,942
Difference	208,750			7,582

Comparison:

Marginal Effect: 3.63%
Retail Equivalent: 3.60%
Difference: .03%

If a drop in rates of roughly nine basis points will elicit the required volume, drop your rate. But perhaps you should be thinking of ways to segment your market in such a way as to not disturb general pricing across all consumer loans. Or perhaps you just accept the retail volume that you can achieve and fill in the required growth target with purchases of comparable loans or securities.

At this point a whole host of market-driven issues come into play:

- How rate sensitive is the market for this type of loan? Are there comparably priced substitutes? Are there ways to differentiate the pricing of loans using points, documentation requirements, pre-qualifications, etc.?
- What about the “street reality” issues? Often it's not easy to enter or exit certain loan markets. Real estate brokers, agents, indirect consumer originators, or whatever your sales delivery system happens to be—all have their own idiosyncrasies.

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- What kind of options exist for your institution to portfolio the risks and rewards of customizing loan products to meet specific customer demands? What is it that they say... “Consumer necessity is the mother of retail product innovation.”

Step 7: Prioritize the Order of Loan Analysis

Earlier I suggested that you look at your largest loan portfolios first, because these represent the cash flows that must be replaced if you are to hit your earnings and derived growth targets.

But, you could also order your loans based on the spread of projected origination rate over the retail bogey. The bigger the spread, assuming that you are originating a relevant volume of loans at this spread, then the “better-priced” your loan is. You must capture some premium for features unique to the loan product or of your loan service. Then you can price your loans until the marginal revenue of the “best-priced” loan category just equals the marginal revenue of the next “best-priced” loan alternative.

In fact, it would be great if you started inventing characteristics (i.e., retail options) that loan customers desired or could be persuaded to desire, priced these options into your loan, and created your own premiums.

Eventually, you price your loans until their marginal revenue equals their retail equivalent yield, and that’s when you consider buying investment securities associated with the appropriate loan portfolios.

When you’re done, you’ve grown. Whether by loans or investments, you’ve grown. And now that you know how much loan growth that you need to fund, you can calculate the marginal cost of your various retail and wholesale funding strategies.

Final Step

Simulate the cumulative effect of your pricing decisions on the risk constraints of your entire portfolio. These constraints would include the impact of your pricing and growth decisions upon interest-rate and liquidity risk. If you bump into any constraints, calculate the income foregone as a result of adhering to these risk constraints. Then you’ll know which risks are the most important to hedge and how much income you can sacrifice in hedging them.

Why spend any more than you need to hedge the risks you’re being paid to take?

Remember the Mission Statement: Make a Buck... and the Vision Statement: Make a Buck Quickly!