Investment Management: Rules for Risk and Reward

Community bank managers find themselves struggling to retool and readjust their strategies in order to cope with an unprecedented economic environment, changed balance sheet mix, and increased regulatory burden. Among other things, the bond portfolio has suddenly taken on greater importance as an earning asset. This raises questions about the best method for strategic management of the investment process.

Bank portfolios must be managed within the context of the total balance sheet, and with an eye on liquidity, cash flow, and price risk. The portfolio is a critical earning asset as well as a vehicle for managing overall interest rate risk. Every time we make a security selection decision or choice, we must clearly define the risk/reward tradeoff. Among other things, this requires first that we identify the minimum acceptable reward, and second, that we identify the maximum acceptable risk.

How much return is enough?
Let’s first determine how much return must be realized in order to make an investment worthwhile. In other words, let’s come up with an investment yield that provides at least enough return to keep the bank on task to satisfy minimum performance objectives. This is our target yield on investments.

Every bank has a target yield that it hopes to realize on its earning assets in order to reach its desired performance goals. The target yield on investments is simply the portion of that return that is weighted according to the percentage of assets represented by investments. For example, a bank might have 70% of their earning assets in loans, leaving 30% in the investment portfolio. If their target yield for all earning assets is 4.65% and we know what the average yield on new loans is, then we can calculate the target yield on investments. For example:

Overall bank target yield = 4.65%
Loans = 70% of earning assets
Investments = 30% of earning assets
Average yield on new loans = 6.00%
Calculation for target yield on investments = (.70 X .06) + (.30 X ?) = .0465
The answer is that the target yield on investments is 1.50%

So we have now established an objective target for investment purchases. The next time we need to put money to work in the bond portfolio, we can identify the minimum reward we are willing to accept.

How much risk is acceptable?
The other aspect of investment decisions involves determining maximum risk tolerance. How much risk is too much? What is the maximum duration of investments that is acceptable for our institution?
The method for determining maximum risk tolerance involves first calculating the percentage of total assets that is dedicated to the securities portfolio. Then we can suggest that portfolio risk in a bear market (using a rate shock stress test) should be limited to that very same percentage of the bank’s capital.

For example, if a $100mm bank’s investment portfolio is $30,000,000 (representing 30% of the total assets on the balance sheet), then we should limit the amount of risk to 30% of capital. Given the proper analysis and reporting tools, we can calculate and show the amount of appreciation or depreciation that can be expected in the portfolio for a given move in interest rates. We can similarly calculate the maximum effective duration that would keep risk of depreciation within our percent of capital limit. In the example, if total capital is $10,000,000 we may find that an effective duration of 3.3 would produce depreciation of $3,000,000 (30% of our capital) in an up 300 basis point rate shock. That would be our maximum risk tolerance, and therefore 3.3 would be our maximum acceptable duration. We have now established two simple parameters within which portfolio management can take place. We can point to the target yield and say that this is the minimum we must earn on new investments. We can also point to the maximum duration and say that this is the most risk we can take. Both calculations are objective and take into consideration the basic relationship between the investment portfolio and the balance sheet overall, including the bank’s level of capital.

Sound investment portfolio management is crucial in the current banking environment. Un-invested excess liquidity is a negative drag on earnings, so sitting in Fed Funds is not a good option. The two simple rules that we’ve discussed provide sound and disciplined guidelines that help keep us on track while still allowing the flexibility to make important choices about the best relative value among the types of bonds available.

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