What if interest rates do not rise as expected?

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He also serves as the Product Manager for DCG's capital planning and stress testing products where he is responsible for developing dynamic business plans which are designed to provide a pro-forma view of the capital profile of an institution.

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**This article is intended to provide general information and not to be used as financial advice in specific situations.*

IT IS NO SECRET THAT THE REGULATORY AGENCIES HAVE PLACED AN EMPHASIS ON BANK'S PREPAREDNESS FOR HIGHER INTEREST RATES. During the 4th quarter of 2013, both the FDIC and OCC released literature which detailed the mounting sensitivity that banks are fostering to elevated interest rates. Although this concern is certainly warranted…one could easily make the argument that it's also singularly focused! In fact, if we rewind the clock 12 short months ago, most would conclude that falling interest rates actually present a greater challenge to levels of Net Interest Income (NII). On April 1, 2013, the 10-year CMT was trading at a paltry yield of 1.61 percent, and bank margins were under considerable duress. (refer to graphat top, next page on right).

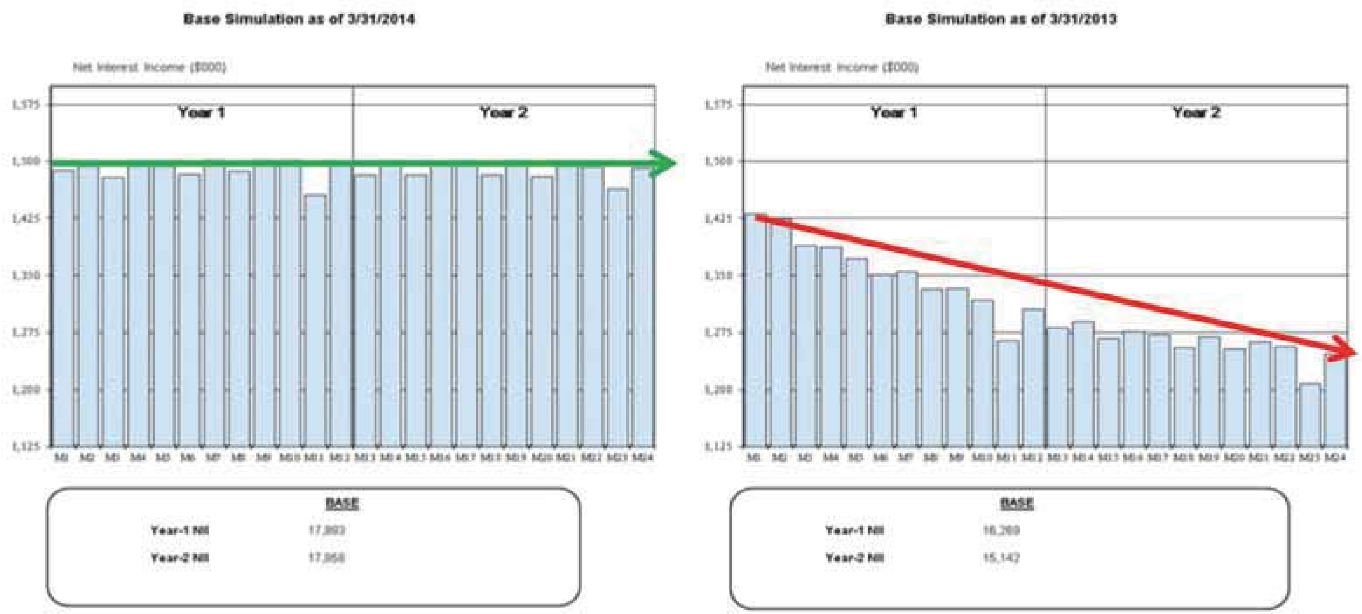
For many community banking institutions, it was a challenge to cover overhead costs given the absolute level of interest rates. However, the bond market experienced a considerable sell-off and, consequently, margins slowly improved with a steeper yield curve. Many banks started to see earnings levels climb, as funding costs remained floored and asset cash flows were reinvested at higher rates (refer to graph at top, next page on left).

Despite the obvious benefit of a steeper yield curve environment, concerns that most community banking organizations may foster a balance sheet which has significant exposure to higher interest rates remain. The purpose of this article is not to discount the detrimental impact of rising rates, instead it is to examine the business risks associated with assuaging internal/external concerns while managing the realities of the current rate environment.

WHY THE CONCERN?

1) Banks have extended duration over the past several years in a quest to alleviate earnings pressures and, 2) NMD balances have swelled across the industry.

One does not need to search long or hard to find evidence of this. The clear conclusion is that at some point, those 30-year fixed rate mortgages at rates in the 4 percent range will look "horrific" when rates move higher. Furthermore, it could be argued that the raw materials which funded the longer-term mortgages (NMDs) are likely to exit the bank when rates increase and better market alternatives emerge. While this logic is fairly easy to follow, it's also potentially shortsighted given the realities of the yield curve over the past several years. For banks that have feared higher rates over the past several years, they have likely



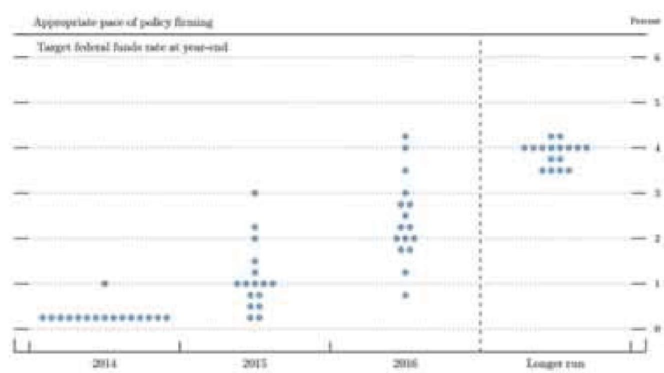
IMPACT OF STEEPER YIELD CURVE ON BANK EARNINGS
(YEAR OVER YEAR COMPARISON)

witnessed their earnings collapse. They have foregone an opportunity to build capital. They may have also exposed their balance sheet to flat or falling interest rates as the annuity stream associated with loans has eroded. *They have done this in an effort to protect their franchise against a hypothetical rate environment which has not (yet) developed.*

BUT RATES MUST GO HIGHER!

Or will they? No one has a crystal ball, but a quick peek at the FOMC "dot-blot" shows that the folks governing the key overnight rate ***do not*** expect interest rates to rapidly increase!

In fact, the forecast is relatively benign for short rates to increase in the near term.



EACH DOT REPRESENTS AN FOMC'S GOVERNORS FORECAST FOR THE FED FUNDS RATE

SO WHAT SHOULD A SAVVY BANKER FOCUS ON?

1) Understand The Elasticity of Your Non-Maturity Deposit Base

FDIC statistics illustrate that NMDs have grown at a compounded rate of approximately 9% since 2008 (falling rate cycle). Conversely, between '04 -'07 (rising-rate cycle) growth in those accounts was less than 1 percent. TRANSLATION… higher rates will signify reduced deposit balances. Many banks are delving into their deposit base via Core Deposit Analysis to garner a better understanding of the "stickiness" of their base and how they may have to price deposits in a higher-rate environment to retain current levels. In short, if one surmises that 10-20 percent of their deposit inflows are "transient," steps should be taken to minimize that impact.

1b) Review the Core Funding Utilization

This is a calculation that quantifies an institution's capacity to fund its longest assets with its longest, more core liabilities. Longer term assets assets are defined by those with cashflows (exclusive of principle payment and assumed prepayment) greater than 5 years and core liabilities are inclusive of DDA, Equity, NOW and Savings accounts. (Please note MMDA and premium rates NOW/Savings/Rewards products should be excluded.) Most banks are comfortable with ratios below 50-60 percent. If that ratio exceeds a comfort level commensurate to the risk profile

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of your institution, maybe it would be prudent to reconsider additional assets with longer duration.

	Base
Assets (> 60 Months)	6,660
Core Liabilities (> 60 Months)	**Volume**
Equity	12,648
Other Liabilities	414
DDA	10,801
NOW	4,047
Savings	516
	28,426
% Utilization	23.4%

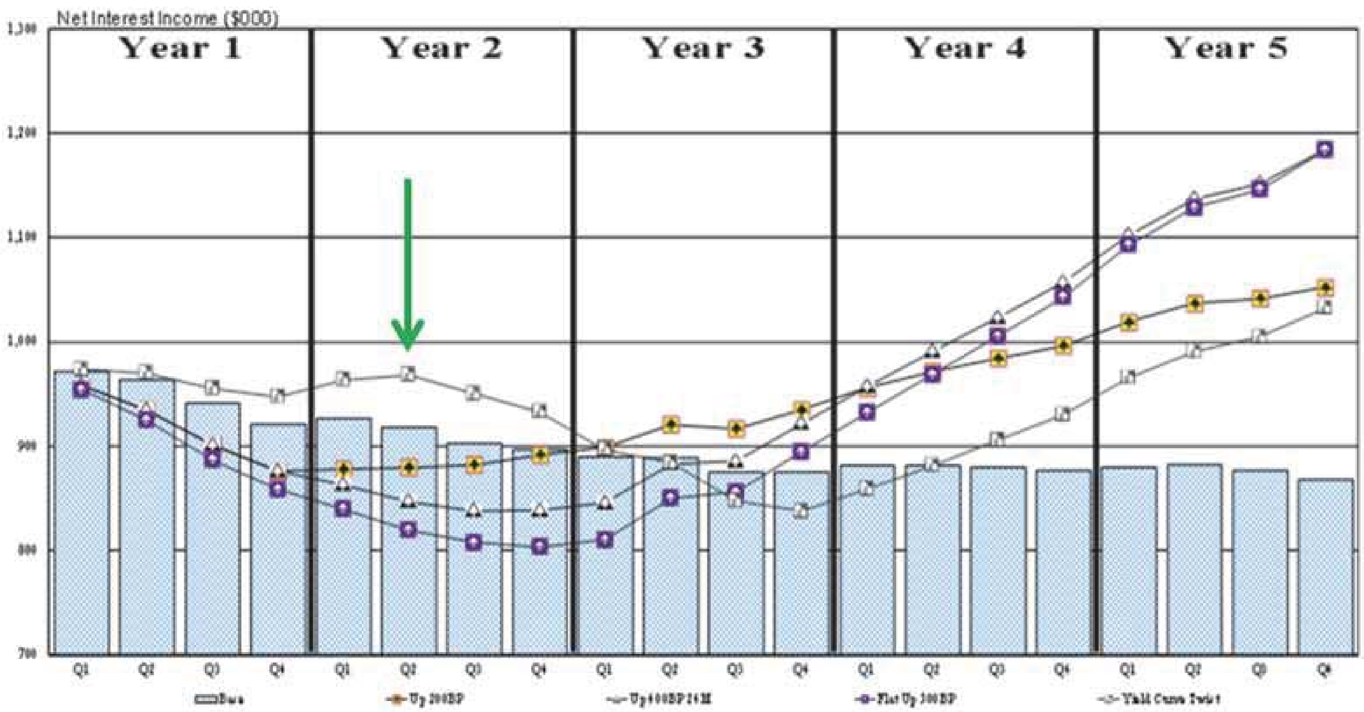
IN THIS EXAMPLE, THE SAMPLE BANK IS ONLY USING 23.4% OF ITS CORE DEPOSIT BASE TO FUND ASSETS WHICH ARE GREATER THAN 5YRS.

2) **Understand What Rate Scenario Creates the Largest Exposures? What is the Modeled Level of Exposure? What Probability Does Management Place on this Scenario?**

Many institutions do not exhibit considerable exposures if rates increased by 200bps (in a parallel ramped fashion). More commonly, exposures develop in more pronounced rising rate environments (i.e. 400bps/500bps). But what is the likelihood of rates increasing by 400bps? A simple look back at the FOMC "dot-blot" indicates this possibility is not expected in the near term. Furthermore, have you evaluated the impact of a yield curve twist (steeper curve in advance of FF rate increase, flatter thereafter) on projected levels of NII?

The analysis below gives management of forecasted look into earnings performance in a handful of environments. The utility of examining a variety of interest rate scenarios is not only to "triangulate" the inherent risks which reside in the balance sheet, but also the level of potential exposures can be quantified and then related to the bottom line. As you can see in the graph above, levels of NII vary significantly dependent upon the timing, shape and level to which interest rates increase. Management needs to understand the potential impact on earnings in all of the above rate scenarios and position the balance sheet accordingly. In other words, if your worst case scenario is substantially higher interest rates (but the probability of that event is low) then should management pay substantial premiums to insulate future earnings in this scenario?

Yield Curve Twist



NOTE THE IMPACT OF A RISING RATE ENVIRONMENT IN WHICH A STEEPER CURVE PRECEDES FF RATE INCREASES

The current regulatory perspective of risks to higher rates creates a dilemma between managing perceived risks and profitability. Management teams should consider the consequences of their strategic decisions in all rate scenarios - not just rising rate scenarios. The common refrain that rates "have to go up" has created an environment in which some banks have bypassed opportunities.

3) **Examine the Risk / Return Tradeoffs Associated with Positioning the Balance Sheet for rising Rates**

The options to reduce exposures to higher rates are fairly straightforward. Most community banks will look at one or a combination of the following:

1. *Originate floating rate assets.* The unfortunate reality is that these markets are limited. Most banks are dealing with customers who seek fixed rate terms with longer amortizations.
2. *Sell longer duration assets.* The easiest solution for Banks with concern for the obvious fact that longer duration assets will cause a perpetual "drag" on earnings is to simply divest those assets. However, with loan demand relatively muted in most markets and investment alternatives remaining unattractive, most banks will retain those assets and assume the interest rate risk.
3. *Extend liabilities.* Many banks are seriously contemplating liability extension. I am often asked, "When should we extend liabilities?" The correct answer is that there is no correct answer. No one will successfully time the market, and if they do it's probably a stroke of luck. However, if the banks analysis depicts a rate scenario under which profitability is threatened, then perhaps it's time to take current earnings off the table. It should be noted that most bankers consider the cost of extension vs. borrowing short an expensive proposition if one is convinced of the aforementioned FOMC forecasts. Rates would have to significantly increase for the extension "bet" to pay off.
4. *Off-Balance sheet instrument (Swaps/caps)* Derivatives serve as an effective tool to manage the interest rate risk position of a balance sheet. Unfortunately, they are also treated with disdain by many management teams given the negative connotation associated with them and the fact that they require a complete understanding of the risks inherent (counterparty/accounting/etc.).

At a minimum, banks should be prepared to understand the tradeoffs with actions designed to "insure" the balance sheet versus higher rates. It's a safe bet that examiners will want to see evidence that this analysis has been conducted.

WORRY ABOUT TODAY AND MANAGE TO TOMORROW'S CIRCUMSTANCES.

The current regulatory perspective of risks to higher rates creates a dilemma between managing perceived risks and profitability. Management teams should consider the consequences of their strategic decisions in all rate scenarios - not just rising rate scenarios. The common refrain that rates "have to go up" has created an environment in which some banks have bypassed opportunities. However, the only guarantee with interest rates is that there are no guarantees. Manage to what is known today, understand the impact on tomorrow and always have plans in place.