

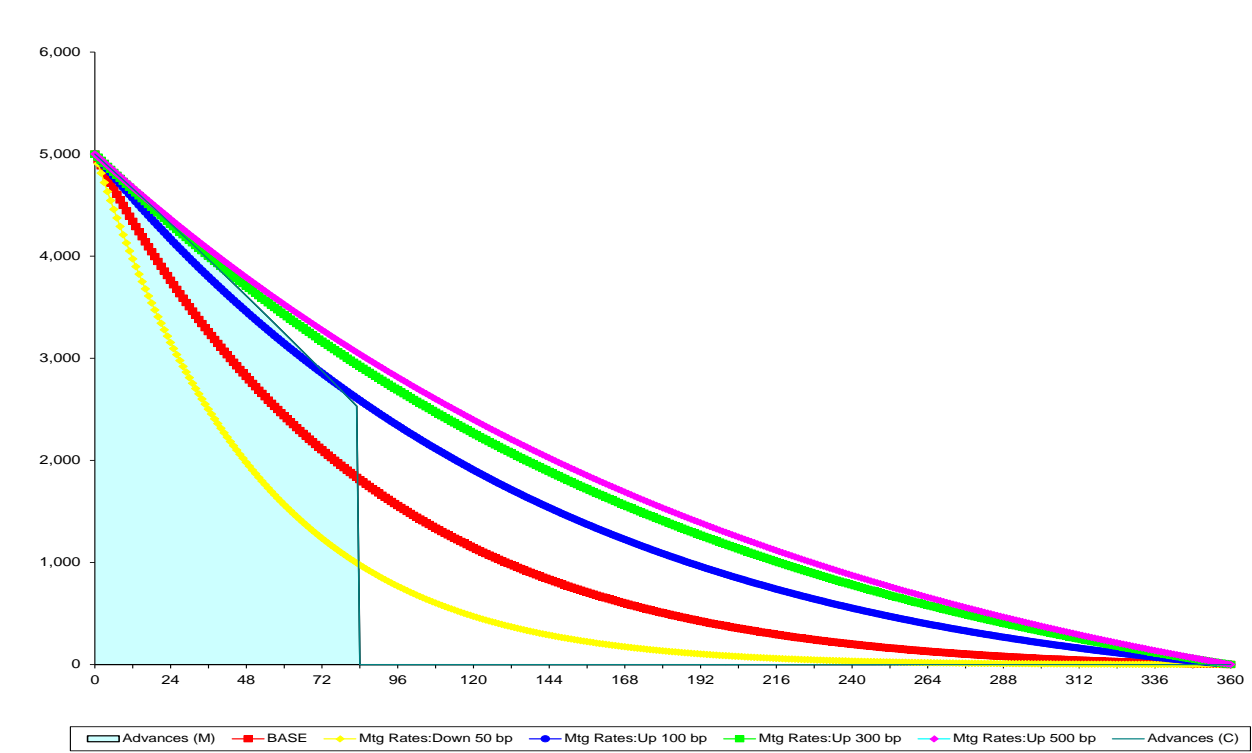
Funding 30-Year Fixed-Rate Mortgages at 4.25%

The sustained low interest rate environment continues to take its toll on the net interest margins and earnings of many financial institutions across New England. The net interest margin, which rose slightly early in 2013 before leveling off in the third and fourth quarters, fell during the first quarter of 2014. The cost of funds continued to fall during the first quarter, though the yield on earning assets fell at a much faster pace, resulting in a decline in net interest margin.

Many institutions sold most, if not all, of their 30-year fixed-rate mortgages into the secondary market during the recent refinancing boom. While that strategy produced substantial gains during that period, 2014 may be bringing a sobering effect to bottom lines. Institutions are now facing the challenge of replacing gains that will not be recurring this year.

A member with some loan demand in its market recently inquired about funding options for holding 30-year fixed-rate mortgages. The member has exposure to rising interest rates and was interested in evaluating strategies funded out to five or seven years.

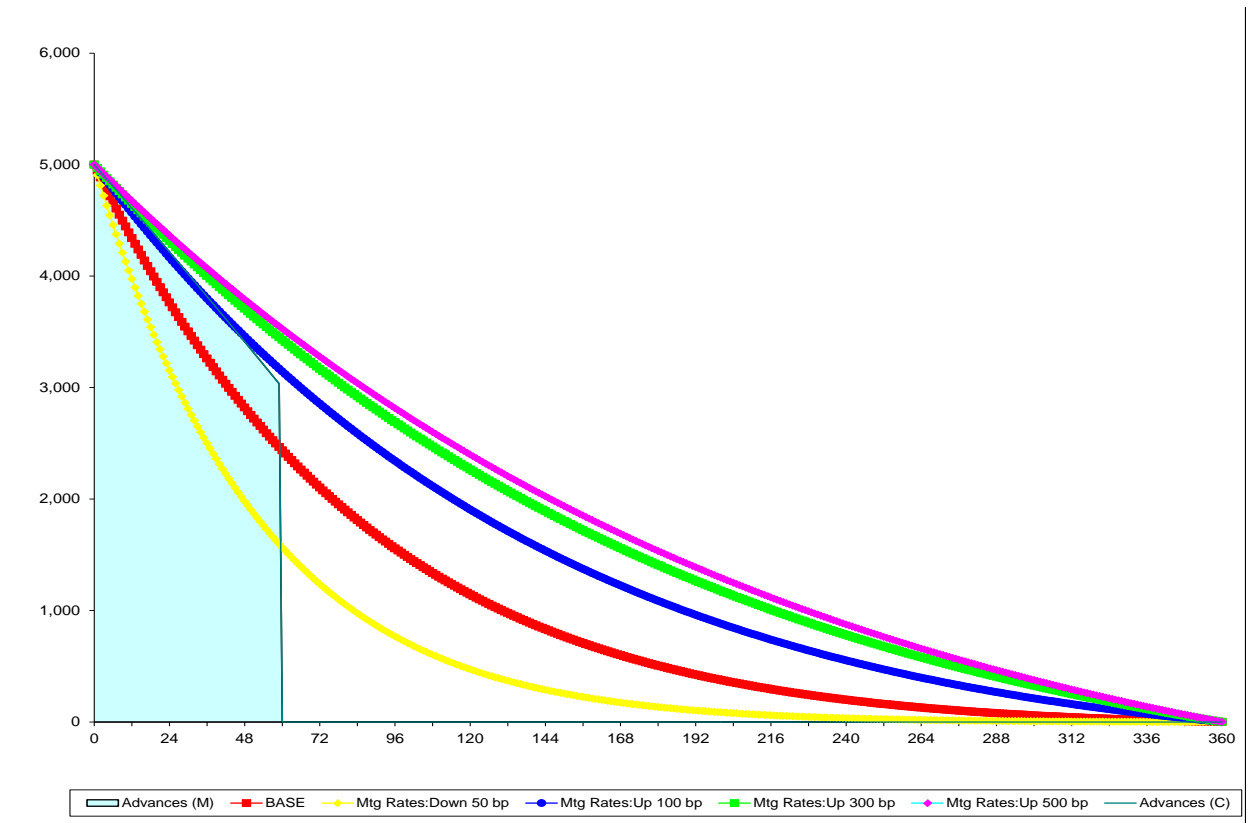
Strategy #1



| 30Y FRM | | 4.25% | Results Years 1 through 7 | |
|---------------------------|--------------|-------|---------------------------|------------|
| | | | Spread | NII (000s) |
| 50% 7Y Classic | 2.61% | | -0.14% | (31) |
| 50% 7Y Amortizer | 1.87% | | 0.39% | 119 |
| Total Funding | 2.24% | | 1.10% | 327 |
| Initial Net Spread | 2.01% | | 1.66% | 489 |
| | | | 1.83% | 544 |
| | | | 1.85% | 551 |

Strategy #1 uses an equal mix of seven-year Classic and Amortizing advances to closely match the projected cash flows of the mortgages in the up-100-basis-points scenario. The initial net spread of the transaction is 201 basis points. In the base case (the red line in the graph above), the strategy is overfunded for the first seven years, resulting in an average spread of 110 basis points. As rates move higher, the strategy hedges the exposure to rising rates. In the plus 300 and 500 basis points strategies, the average spreads are 183 and 185 basis points, respectively.

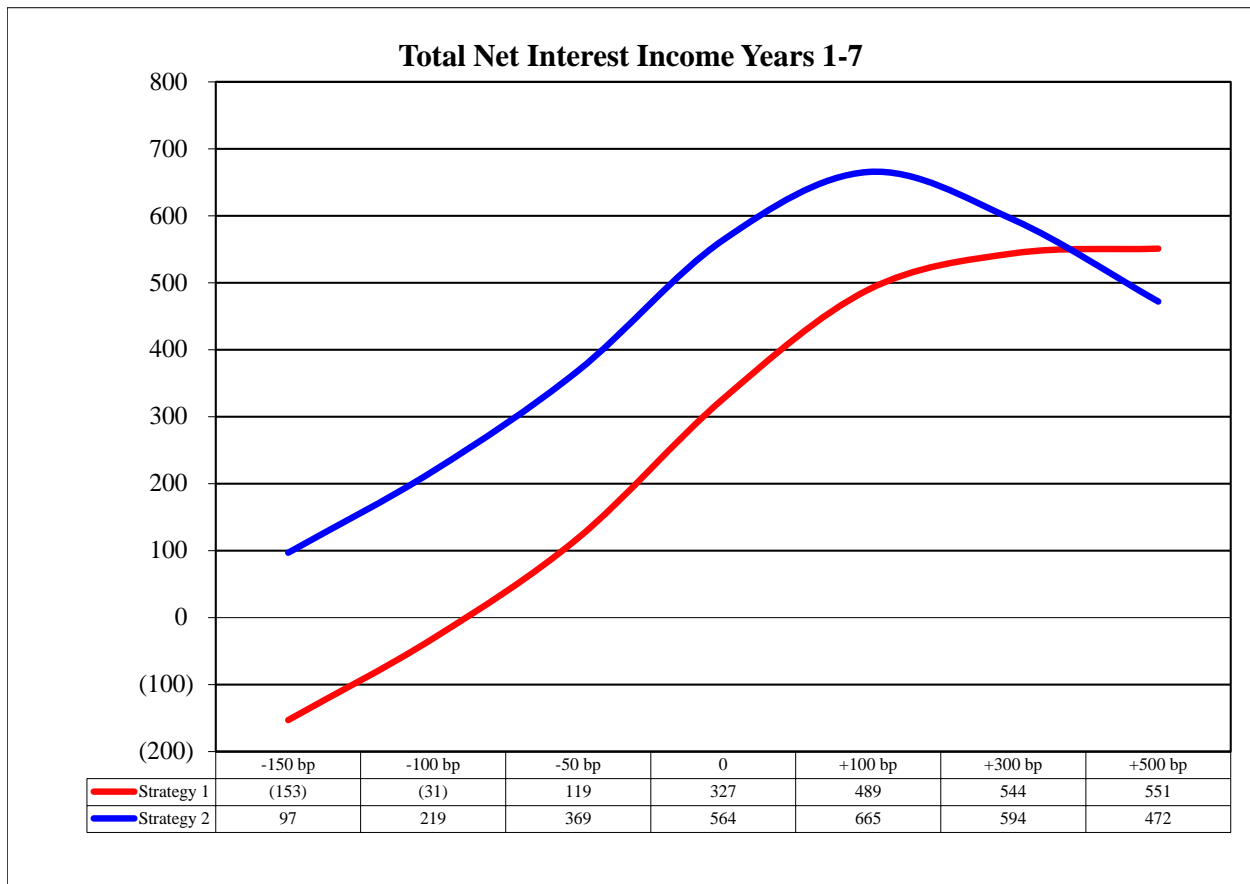
Strategy #2



| 30Y FRM | | 4.25% | Results Years 1 through 7 | |
|---------------------------|--|--------------|---------------------------|------------|
| | | | Spread | NII (000s) |
| 60% 5Y Classic | | 2.02% | Down 100 basis points | 219 |
| 40% 5Y Amortizer | | 1.37% | Down 50 basis points | 369 |
| Total Funding | | 1.76% | Rates Unchanged | 564 |
| Initial Net Spread | | 2.49% | Up 100 basis points | 665 |
| | | | Up 300 basis points | 594 |
| | | | Up 500 basis points | 472 |

Strategy #2 examines the impact of shortening the funding from seven to five years. As in strategy #1, we are attempting to match the cash flows of the mortgages in the up-100-basis-points scenario — but only out to five years in this strategy. We use 60 percent of a five-year Classic advance and 40 percent of a five-year amortizing advance, resulting in an initial spread of 249 basis points — almost 50 basis points higher than strategy #1. If rates remain unchanged, the spread for years one through seven averages more than 100 basis points greater than strategy #1. In fact, it is better than strategy #1 in every scenario with the exception of up 500 basis points.

This chart compares the net interest income of the two strategies for years one through seven.



The five-year funding strategy produces higher levels of net interest income in all rate environments except up 500 basis points. Given the increased cost of the funding used in strategy #1, it may be an expensive hedge for a scenario that may not materialize. Please contact me at kevin.martin@fhlbboston.com if you are interested in examining how FHLB Boston advances can help you hedge the IRR of holding long-term assets while adding to your bottom line.