Federal Home Loan Bank of Boston

Using Classic Advances to Fund 30-Year Fixed-Rate Mortgage Loans

Home purchase applications have begun to increase in 2018 compared to 2017 despite 30- year mortgage rates rising almost 50 basis points since the beginning of the year. Members looking to grow their loan portfolios this year to meet profitability targets could fund some of their 30-year fixed-rate mortgage production with FHLB Boston long-term advances.

Let's explore how $5 million of 30-year fixed-rate mortgages with a coupon of 4.49 percent could be funded to manage the exposure to rising interest rates. To hedge your institution against rising interest rates, it's important to stabilize the cost of funds, while at the same time guarding against the risk of being "over-funded" in the event that interest rates decline. This would lead to an increase in prepayments and leave the amount of advances outstanding exceeding the balance of the mortgage pool. After five years, if rates are unchanged, the mortgage balance would be approximately $2.5 million at a prepayment speed of 12 percent CPR. If rates decline by 50 basis points and prepayments increase to 19 percent CPR, the balance would be approximately $1.7 million. Using $2 million of a five-year Classic advance provides a reasonable balance between these possible outcomes. Additionally, we will use $600 thousand each of two-, three-, and four-year Classic advances in addition to $1.2 million of a one-month Classic advance. The initial net interest spread on the strategy is 1.77 percent. The initial weighted average cost of the advances is 2.72 percent and they have an average life of slightly more than 3 years. The average cost of funds over seven years (in the base case; no change in rates) increases 2 basis points from the initial cost, to 2.74 percent. If interest rates increase 300 basis points, the cost of funds increases from 2.72 percent to 3.79 percent or a little more than one third of the increase in market rates. Net interest income declines in all rate scenarios compared to the rates unchanged scenario but averages $319 thousand over seven years in the six scenarios modeled. The results of this funding solution can be seen in the following table:

	30Y Fixed-Rate Mortgages	4.49%
$1.20M	1M Classsic	2.03%
$0.60M	2Y Classic	2.71%
$0.60M	3Y Classic	2.85%
$0.60M	4Y Classic	2.96%
$1.25M	5Y Classic	3.02%
$5.00M	**Total Funding**	**2.72%**
	Initial Net Spread	**1.77%**

Results Years 1 through 7	Cost of Funds	Net Interest Spread	Net Interest Income ($000s)
Down 100 basis points	2.79%	1.15%	$ 228
Down 50 basis points	2.77%	1.57%	329
Rates Unchanged	2.74%	1.75%	419
Up 100 basis points	3.01%	1.48%	409
Up 200 basis points	3.39%	1.10%	317
Up 300 basis points	3.79%	0.70%	213

Thirty-year mortgages continue to provide opportunities for profitable balance sheet growth and are one of the primary sources of collateral pledged to secure advances and other activities with the Bank. Are you interested in examining borrowing alternatives to fund your balance sheet growth? We can work with you to model funding alternatives for the loans or investments you are using to grow your balance sheet. Please contact me at kevin.martin@fhlbboston.com or 617-292-9644 to see what will work for your institution.