



## Are You Ready for a Rise in Rates? Consider Floating Rate Advances with Embedded Caps to Help Manage Interest Rate Risk.

We are certainly in unprecedented times as we progress through this prolonged low-rate environment. The economy has not experienced a robust recovery and the Federal Reserve’s monetary policy has served to keep short-term interest rates low for a very long time. As a result, some members are opting to fund their balance sheets “short” to fend off margin compression (45% of our advance book has a maturity of one year or less).

We all expect that interest rates will eventually rise; the question is what to do now to plan for this possibility? Many members are concerned about rising rates and are facing regulatory pressure to address this risk now. However, it’s a difficult decision if your institution’s interest rate outlook does not account for a rapid rise in rates in the near term. Your membership in the FHLBNY affords you many opportunities and products to help combat this challenging rate environment. One advance to consider is the Adjustable Rate Credit (ARC) Advance with an embedded interest rate cap.

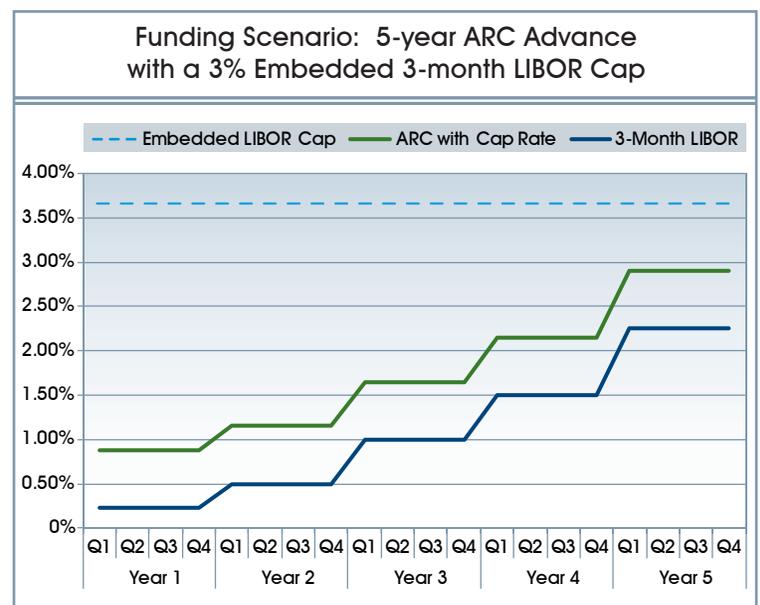
An ARC Advance is a floating rate advance that can be tied to a variety of indices, most commonly 1- and 3-month LIBOR.<sup>1</sup> As short-term rates fluctuate, so does the coupon rate of the ARC Advance, which would adjust periodically based on the term of the index (if tied to 1-month LIBOR, the ARC Advance would re-price monthly; if tied to 3-month LIBOR the ARC Advance would re-price quarterly; etc). Asset sensitive members traditionally use ARC Advances to fund a floating rate asset class, whereas the interest expense of the ARC Advance would fall in conjunction with falling yields experienced on re-pricing assets. ARC Advances help to reduce “basis risk” by allowing a member to match-fund floating rate assets with funding tied to the exact index of that asset.

Interest rate caps can be embedded into an ARC Advance, which makes it an appealing source of funding for liability sensitive members. An ARC Advance with an embedded interest rate cap (ARC with Cap) is a floating rate advance with an embedded derivative (“cap”) that will place a ceiling or a limit on how high the advance rate can rise. Since the cap is embedded into the underlying advance, it can potentially be accounted for without the same issues associated with stand-alone derivatives.<sup>2</sup> The advance initially floats to a pre-determined spread to an index, and then turns fixed in the event the associated floating rate index surpasses the pre-determined cap threshold. If rates fall back below the cap during the life of the advance, the rate will re-price downward.

In a rising rate environment, the ARC with Cap helps preserve spread, but could re-price downward and remain lower costing should rates remain low. For liability sensitive members, an

ARC with Cap could potentially mitigate Net Interest Income at Risk and also could benefit Economic Value of Equity at Risk, as the benefit of the embedded cap would have value in regulatory shock scenarios.

Let’s examine the scenario in the following chart. This chart illustrates the behavior of a 5-year ARC Advance with a 3% embedded 3-month LIBOR cap under a hypothetical interest rate scenario. As of August 14, 2014, this advance was priced at 3-month LIBOR plus 0.65%, giving this advance an initial rate of 0.88%, with an “all-in” advance cap of 3.65% (3% cap plus the 65 basis point spread). As short-term rates rise, the advance floats upward with 3-month LIBOR, re-pricing on a quarterly basis, and if rates remain low the advance remains lower costing. In this scenario, 3-month LIBOR rises gradually from 0.23% at the inception of this advance to 2.25% in year five. When compared to a 5-year Fixed-Rate Advance priced at 2.07%, and assuming an advance value of \$25 million, the overall cost savings you could achieve in this scenario with this structure over the five-year period would be approximately \$405,000.



Depending on your institution’s outlook on rates and interest rate risk position, the ARC with Cap could potentially be a valuable tool to help maintain profitability and margin now, and preserve future spread in the event that rates rise rapidly over the course of the term of the advance.

As your liquidity provider, the FHLBNY strives to offer you products and solutions to meet your liquidity and hedging needs. Contact a Calling Officer at (212) 441-6700 to discuss the ARC with Cap or any other funding strategy.

<sup>1</sup>ARC Advances may be tied to other indices as well, such as the Prime Rate, Fed Funds Rate, Treasury Bill, and Bond rates.

<sup>2</sup>Members are advised to consult with their accountant in order to confirm the appropriate accounting treatment.



## Have You Considered the Economic Impact of Your Dividend?

It is important for members to factor in the economic benefit of the FHLBNY's dividend rate, which, depending on the advance term, can substantially lower the "all-in" borrowing cost of an advance. The FHLBNY has an activity-based stock requirement equal to 4.5% of its outstanding advances. The performance of our capital stock has been historically strong, and has benefitted members by offsetting or lowering the "all-in" cost of the advance. For example, if a member borrows \$1 million for one-week at 37 bps, with a capital stock requirement of \$45,000 (with a dividend yield assumption of 4.05%), the net income from the activity-based stock purchase would effectively reduce the interest expense of this trade by \$34.95, or effectively lowering the "all-in" rate to 21 bps, 16 bps less than the coupon rate.

As illustrated in the example provided, the economic impact of our activity-based stock can be determined by comparing an alternative investment yield to that of our dividend — assuming that a member can receive an alternative short-term investment yield equivalent to the cost of the advance (37 bps in this case), the positive spread created by the yield of our stock dividend effectively lowers the overall cost of the transaction, and quite substantially in the shorter tenures. For longer-term advances the dividend would impact the borrowing cost to a lesser degree; however, a benefit would remain and the "all-in"

borrowing rate would be lower than the regular posted rate. Although FHLBNY capital stock has been high-performing and has had a very competitive dividend rate for a long period of time, the dividend rate is not guaranteed, and as such, may fluctuate throughout the life of the advance. The economic impact of the stock dividend will vary based on your assumption of the dividend rate.

### Example: the "All-In" Borrowing Rate

Principal	FHLBNY Advance Rate	Interest Cost on Advance (1)
\$1,000,000.00	0.37%	\$71.94
Required Stock (4.5% of Advance)	Most Recent Dividend Rate	Interest Earned on FHLBNY Stock (2)
\$45,000.00	4.05%	\$34.95
Comparable Investment Rate	Interest on Comp. Investment (3)	Net Benefit from FHLBNY Stock Purchase (4 = 2-3)
0.37%	\$3.24	\$31.71
<b>Terms used in example:</b>		<b>Total Interest Cost (1-4)</b>
» Days to Maturity: 7		\$40.23
» Advance Day Count: 360		
» Investment Day Count: 365		
<b>Total "All-In" Rate: 0.210%   Economic Impact of Dividend: 0.16%</b>		

## FHLBNY Reminder: Monthly First Home Club<sup>sm</sup> (FHC) Enrollment Periods, Beginning in September

Beginning in September, and through the balance of the 2014 year, the FHLBNY will have monthly FHC enrollment periods. Monthly Enrollments Reports must be submitted via e-mail to the FHC mailbox (FHC@fhlbny.com) no later than the 10<sup>th</sup> of each month, by 5:00 p.m. ET, for households that have established savings accounts during the preceding month. The only exception is the first monthly enrollment report due September 10, 2014, that will include households that have opened savings accounts in July and August.

All necessary forms are available on our website.

If you have any questions, please contact a FHC team member at (212) 441-6850.

### FHC Enrollment Schedule

Enrollment Report Due Date	Enrollment Period Covered
9/10/14	7/01/14 - 8/31/14
10/10/14	9/01/14 - 9/30/14
11/10/14	10/01/14 - 10/31/14
12/10/14	11/01/14 - 11/30/14

The information provided by the Federal Home Loan Bank of New York (FHLBNY) in this communication is set forth for informational purposes only. The information should not be construed as an opinion, recommendation, or solicitation regarding the use of any financial strategy and/or the purchase or sale of any financial instrument. All customers are advised to conduct their own independent due diligence before making any financial decisions. Please note that the past performance of any FHLBNY service or product should not be viewed as a guarantee of future results. Also, the information presented here and/or the services or products provided by the FHLBNY may change at any time without notice.

**CONTACT US** | 101 Park Avenue, New York, NY 10178-0599 | T: (212) 441-6700 | F: (212) 949-0231 | [www.fhlbny.com](http://www.fhlbny.com)



FIRST CLASS  
U.S. Postage  
PAID