

Value in Agency Callable Bonds with a Step-Up Coupon and One Call Date

Agency callable bonds with a coupon that steps up at an extended call date one to two years from today are good defensive investments against higher interest rates in this market.

As an example, here is a step up bond that Country Club Bank underwrote back in mid-February.

Settlement Date:	3/11/2022	
Maturity Date:	3/11/2027	5 Year Final
Call Date:	3/11/2024	Only One Call Date
Coupon for first 2 Years:	1.75%	
Coupon for last 3 Years:	3.00%	If Not Called
CUSIP:	3130AR3E9	
Price:	100.00	
Yield to Next Call:	1.75%	
Yield to Worst Call:	1.75%	
Yield to Maturity:	2.48%	

At the time of underwriting the 2 year TSY note was 1.52%, the 3 year TSY was 1.72% and the 5 year TSY was 1.87%. The spreads to TSY are as follows:

Yield	From	Until	Term	TSY Rate	Spread to TSY bps
1.75%	3/11/2022	3/11/2024	2 Year	1.52%	23
3.00%	3/11/2024	3/11/2027	3 Year	1.72%	128
2.48%	3/11/2022	3/11/2027	5 Year	1.87%	62

This bond will either be a 2 year bond or a 5 year bond depending on whether or not the bond is called at the end of year 2. Comparing the bond to the 2 year TSY, 23 bps is an attractive spread to TSY for a two year investment.

At the end of year 2, the bond will either be called or the coupon will step-up to 3.00% and the bond will become a 3 year bullet until maturity. The spread of the step-up coupon to the current 3 year TSY is significant for the following reasons:

1. If 3 year rates 2 years from now have increased 1.28% (from 1.72% today to 3.00% 2 years from now) and the bond is not called, you will own a 3 year bullet with a 3.00% coupon and a market value of around 100.00.
2. If 3 year rates 2 years from now have increased between 0.00% and 1.27% such that the 3 year rate at that time is less than 3.00%, the bond will most likely get called, even though rates are higher, so you get your principal back to reinvest at higher rates.

The following chart shows the projected market value of the bond 2 years from today based on different levels of 3 year rates 2 years from today:

<u>3yr Rate 2yrs from Today</u>	<u>3yr Rate Increase from Today</u>	<u>Projected Market Value</u>	<u>Projected Bond Call</u>
1.72% to 2.99%	0.00% to 1.27%	100.00	Yes
3.00%	1.28%	100.00	Yes or No
3.25%	1.53%	99.25	No

(Market values and calls are approximate)

If 3 year rates 2 years from today are 3.25% and the bond is not called, the bond will be 25 bps underwater and the market value of the step up bond will be approximately 99.25 ($3 \text{ duration} \times .25 = 0.75 \text{ loss}$) at that time. For comparison, a fixed 3yr TSY note that has a coupon 153 bps below current 3yr TSY rates would have a loss of around 4.50 points vs. the loss of only 0.75 points for the step up bond, providing good interest rate risk protection against higher interest rates.

FHLB 1 3/4 03/11/27 Corp		Settings	Yield and Spread Analysis				
		No Notes	95 Buy	96 Sell			
1) Yield & Spread	2) Graphs	3) Pricing	4) Description	5) Custom	6) Calls		
Settlement Date	03/11/22	Price	100.00	Blend	Full Screen		
YTC (3130AR3E9)	Date	Price	Yield				
Yield to Maturity	03/11/2027	100.00	2.481				
Yield to Custom	03/11/2024	100.00	1.750				
Yield to Next Call	03/11/2024	100.00	1.750				
Yield to Worst Call	03/11/2024	100.00	1.750				
May be called on 03/11/2024							
	Date	Price	Yield	Treas Crv	Spr	Adj Dur	Risk
*	03/11/24	100.0000	1.7500	1.517	0.233	1.957	1.957
*	03/11/27	100.0000	2.4814	1.865	0.616	4.710	4.710

Source: Bloomberg, LLC

For more information please contact your Country Club Bank Investment Sales Representative.

David Farris
 Asset Management Group, Inc.
 (800) 226-1923