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RISING AND INVERTED YIELD CURVES – DERIVATIVES ARE BACK! NEW DECLINING RATE IMPACTS AND OPPORTUNITIES Part 2*

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UPDATE ON THE CASH-BACKED BOND ADDITIONAL BASIS PLAY

• Cash-Backed Bonds, under any structure, add two streams of construction period interest: (i) that on the **fully funded Cash-Backed Bonds** and (ii) that on the **taxable draw-down bank construction loan which will fund construction or substantial rehabilitation**, in each case accruing before the certificate of occupancy is obtained or rehab is complete.

		Mid-2023 (4.00% Bonds)	Today (3.20% Bonds) (Down 20%)
Extra Cons Period Interest:	2.5 Yrs X Bond Coupon	10.00% of Bonds	8.00% of Bonds
If Project in QCT or DDA:	Multiply by X 1.3	+ 3.00%	+ 2.40%
If state tax credits available, add another:		+ 2.00-4.00%	+ 1.50-3.00%
Total Gross Additional Tax Credit Basis		15.00-17.00% of Bonds, or 7.50-8.50% of TDC*	12.00-13.50% of Bonds, or 6.00-6.75% of TDC*
Additional Syndication Proceeds to Borrower: 45%** X Additional LIHTC Basis		3.40-3.80% of TDC	2.70-3.00% of TDC
Less: COI on Cash Backed Bonds, Additional Interest from Taxable Construction Loan, and Payment of federal income tax on escrow earnings under Section 266 election***		1.00% of TDC	1.00% of TDC
Total Potential Benefits to Borrower		Roughly 2.40-2.80% of TDC	Roughly 1.70-2.00% of TDC (Down About 30%)

^{*} If Bonds slightly > 50% of TDC.

^{***} The cost of issuance of the Cash Backed Bonds may run about 1.0% of the bond amount or 0.5% of TDC. In addition, there may be some incremental costs of the construction loan interest being taxable rather than tax-exempt, but a bank acquiring the 4% LIHTC (if that's the fact pattern) would be a related person, and thus construction loan interest would be taxable to it in any event. Finally, in today's market, most borrowers will elect to capitalize interest under Section 266 of the Code to support including it in basis and will allocate to one or more constituent entities in the borrower responsibility to pay federal income tax on the interest earnings in the escrow. This will often be allocated to the tax credit investors, who are generally 21% federal income tax payers. Some, but not all, tax credit investors, especially if different from the taxable draw-down construction period lender, may reduce tax credit equity pricing by 1 to 3 cents (a cost equal to about 0.5% of TDC) to offset this. On the other hand, if a bank is both the draw-down construction lender and the tax credit investor, the benefit of serving in both of these roles may largely offset or more than offset this potentially negative factor.



^{**} Assume the Tax Credits sell for up front proceeds equal to 45% of the additional eligible basis.

• Cash-Backed Bonds with Tax-Exempt Permanent Loans – Retaining Positive Arbitrage:

	Mid-2023	<mark>Today</mark>		
Positive Arbitrage:	2.5 Yrs X (4.50% - 4.00%) = 1.25% of Bonds = 0.65% of TDC*	,		
Cash Benefit to Borrower from Additional Basis	2.40-2.80% of TDC	1.70-2.00% of TDC		
Potential Retained Positive Arbitrage	0.65% of TDC	0.65% of TDC		
Total Potential Benefits to Borrower	Roughly 3.05-3.45% of TDC*	Roughly 2.35-2.65% of TDC* (Down About 25%)		

- Net proceeds likely to decline as short-term rates fall. Developers should plan in advance.
- Optimal structuring involves at least five major elements and is much more complex than most developers think. We have seen \$100,000's left on the table on some deals.

^{*} If bonds slightly > 50% of TDC.

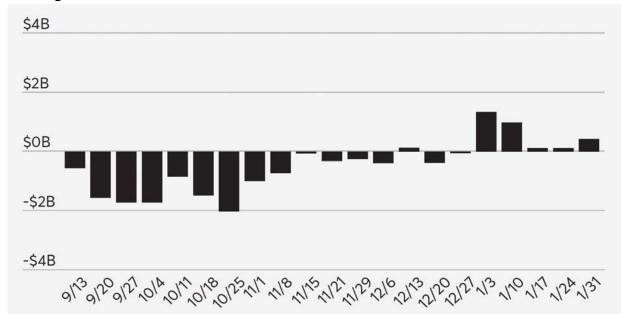




IMPROVING TAX-EXEMPT PUBLIC MARKETS

- BlackRock says Americans sitting on \$17 trillion of cash equivalents (e.g., money market funds at 4-5% yields).
- As yields go down, BlackRock expects an improved appetite for longer term bonds.
- Late fall to January, 2024: Bond fund outflows for most of 2022-2023 appear to be moving to small inflows. 🔾

ICI reports more muni bond fund* inflows



Source: The Investment Company Institute; The Bond Buyer 2/8/2024

 $[\]mbox{*}$ Bond funds are about 25-30% of the \$400 billion annual municipal market.



TWO TIMELY TAX-EXEMPT PUBLICLY OFFERED DEBT PRODUCTS

Improving public markets have created two opportunities:

1. A+ RATED HOUSING AUTHORITY BACKED BONDS

- A number of housing authorities own multiple projects and have strong balance sheets and **investment grade** (A or higher) ratings.
- If such an authority agrees to fund debt service shortfalls, we can obtain its investment grade rating (e.g., A+ or higher) on tax exempt bonds issued to acquire existing housing projects or build new ones.
- A developer can perform various functions in these financings and be paid competitive fees.
- Typical deal structure:
 - > Issue A+ rated publicly offered bonds.
 - Recent maturities: 10-year This is the sweet spot in the tax exempt yield curve and these authorities can handle refinancing risk.
 - > Recent yields on $2 \approx 100 million financings: 4.30 4.35%; now close to 4.10%.
 - > We are now seeing in multiple markets.
 - > Sam Adams at KeyBanc Capital Markets will address in the 10:15 A.M. panel tomorrow.





2. FANNIE MAE FORWARD M. TEBS SHOWING NEW STRENGTH

Some Recent Executions:

10-Year Treasury Yield	4.20%
"Spread" to the 10-Year	0.50
	4.70%
Guaranty/Servicing Fees*	0.80
	5.50%

- Negative arbitrage during construction period very low (50-80 basis points).
- Eligible for an even greater Additional Basis Boost as discussed above if appropriate steps are taken.

^{*} May be lower if green financing and other Fannie Mae programs used.



WHERE ARE RATES HEADED??? THREE DIFFERENT 10-YEAR TREASURY RATE FORECASTS

2/22/24

1. Wade's "Scientific" 10-Year U.S. Treasury Yield Forecast

	3 Month	6 Month	1 Year	10 Year	30 Year	<mark>3mo - 10 yr</mark>	3mo - 30 yr	1yr - 30 yr
1/1/1980	12.00	11.37	12.00	11.43	11.27	-0.57	-0.73	-0.73
1/1/1985	7.72	8.06	8.42	10.62	10.79	2.90	3.06	2.37
1/1/1990	7.75	7.85	7.89	8.55	8.61	0.81	0.86	0.72
1/1/1995	5.66	5.82	5.94	6.57	6.88	0.91	1.22	0.94
1/1/2000	6.00	6.17	6.11	6.03	5.94	0.03	-0.06	-0.17
1/1/2005	3.22	3.50	3.62	4.29	4.56	1.07	1.34	0.94
1/1/2010	0.14	0.20	0.32	3.22	4.25	3.08	4.11	3.93
1/1/2015	0.05	0.17	0.32	2.14	2.84	2.09	2.79	2.52
1/1/2020	0.36	0.37	0.37	0.89	1.56	0.53	1.20	1.19
1/29/2024	5.42	5.19	4.76	4.08	4.31	-1.34	-1.11	-0.45
Average	1.84	4.87	4.98	5.78	6.10	0.95	1.27	1.13
Average- Pos Slope Yrs*	0.94	1.06	1.16	2.63	3.30	<mark>1.69</mark>	2.36	2.14

^{*}Ignores dates when yield curve was inverted

Guess at Market View of CPI**

**Plus or minus 500 Basis Points 😊



Wade's Forecast 10-Year Treasury Yield 4.29%





2. Recent Report – Highly Regarded Investment Research Firm:

- Hard to time first Fed rate cut.
- But when they start, will likely be faster than expected.
- Expect inflation at 2% by mid-year.
- In 5 rate cuts since 1974, Fed has always cut nominal rates faster than decline in inflation, leading to a significant drop in short-term rates.
- Expect 3.6% rate on 10-year Treasury at year end.





- 3. Chris Thornberg Beacon Economics Another Highly Regarded Economic Research Firm:
 - Speaking at Los Angeles conference on February 15.
 - Expects 5.2% rate on 10-year Treasury at year end.

• ANSWER: NO ONE KNOWS ON LONG-TERM RATES! ©

But short-term rates likely to drop.



