GRANT'S
INTEREST RATE OBSERVER®
Vol. 32, No. 16b Two Wall Street, New York, New York 10005 • www.grantspub.com AUGUST 8, 2014

Yield to steepness

No, you haven't seen everything yet, proof of which is the following exposition on yield-curve steepener bonds. Steepener bonds are instruments whose payoff depends on the difference between short- and long-term interest rates. The greater the difference, the higher the yield, within limits. In the desert of income, they constitute a kind of investment-grade oasis.

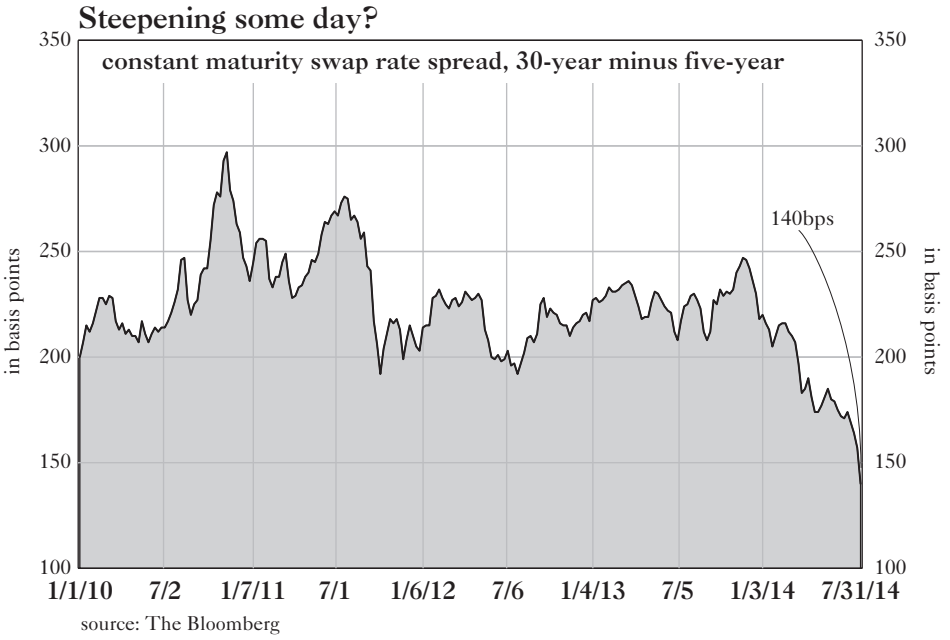
Not a perfect one: The bonds are obscure, scarce, illiquid, generally callable, potentially volatile and not quite self-explanatory. For the latter reason, according to Finra, a.k.a., the Financial Industry Regulatory Authority, they are unsuitable for the lay public. Only partly for that reason, we commend them to the income-seeking subscribers to *Grant's*. We will commend them more heartily come some future episode of yield-curve distress (of which more below).

The antecedent to steepener bonds was the old NOB trade, i.e., "notes-over-bonds." Fixed-income adepts will remember this speculation on the shape of the yield curve. The punter was paid if long rates rose faster than short rates or, alternatively, short rates fell faster than long ones. To make the magic happen, he or she went long a short-term security and sold short a longer-dated one. To enhance the intensity of the experience, the speculator applied leverage. Steepener bonds are to the do-it-yourself notes-over-bonds speculation what a cake is to a cake mix. The bonds are the item itself ready-made, with a contingent yield attached.

According to George Thoreson, senior portfolio manager with Northwest Asset Management, Mercer Island, Wash., who called this curious asset class to our attention, the first steepener bonds appeared in about 2010. Dribs and drabs are the standard issue size; $60 million is about as big as they get. All together, says Bloomberg, $1 billion came to market in 2013. Practitioners advise that, while it's possible to accumulate several million dollars' worth of a given issue, the buying takes time. From these facts one would suppose that the small fry do the issuing. The fact is that the too-big-to-fail banks are the obligors, e.g., Goldman Sachs, Citigroup, Bank of America, Royal Bank of Scotland, Barclays, and Bank of Nova Scotia.

A real live example of the type is a 2013 Citigroup issue, the "callable, leveraged CMS spread notes due Oct. 30, 2033." The first thing to notice is the volume of issuance: all of $12 million. You look twice: Has this error-prone institution dropped a zero or two from the description of its own security? It has not. Proceeds, after the quarter-point underwriting concession, made a grand total of $11.7 million.

Before tossing this minnow back into the ocean, consider that the minuscule size helps to create the PA, or family-office-size opportunity. Anyway, the bonds pay a fixed rate of 10% for the first year, a variable rate thereafter. The variable rate in this case is calculated as follows: subtract the five-year yield from the 30-year point and multiply by 5 ¼ (the term "leverage" in these securities pertains to the multiplication factor, in this case 5 ¼, not to any return-enhancing debt). The yields in



source: The Bloomberg

question are drawn from the constant maturity swap curve; at intervals of between one and 30 years, the CMS curve measures what a fixed-rate payer entering into an interest-rate swap will pay to receive the three-month London interbank offered rate, i.e., the notorious Libor. The CMS curve looks very much like the more familiar Treasury curve.

That 10% teaser rate, as noted, is good for only 12 months. Come October, the bonds will begin to pay the formula-derived variable rate. If October were already upon us, the bonds would be resetting to their first calculated yield: the 30-year rate of 3.30% minus the five-year rate of 1.90% (a difference of 140 basis points) times 5 ¼. The first coupon would therefore be, at an annual rate, 7.35%. The peak yield is set at 10%, the minimum rate at zero. The bonds are callable at par on any interest payment date beginning on the second anniversary of issuance. Bloomberg quotes them at 94 1/4.

Different terms pertain in other securities. Thus, a certain 2010 Bank of America issue paid a 13% first-year teaser rate, after which has come a succession of coupons computed according to the following formula: the 10-year swap rate minus the two-year swap rate minus 0.125% times 4 ½. Using the values quoted on July 31, the bonds would show an annualized yield of 8.26%. Bloomberg quotes them at 92.575, which would lift the current yield to 8.92%.

"Of the many possible reasons to steer clear of steepeners," observes colleague Charley Grant, "credit risk is only one and not the greatest. Default of the major banks is probably remote given both the extraordinary measures which the government took to avert it in 2008 or the myriad fiascoes that Citigroup and its predecessors have survived over the past 200 years. There are more immediate risks.

"For starters," Grant proceeds, "the curve has tended to flatten, not steepen, in the years following the 2007-09 credit upheaval. The difference between the 30-year and five-year constant maturity swap rates widened to 297 basis points in November 2010; at July 31, it stood at just 140 basis points. Tens-to-twos have dropped to 196 basis points from 273 basis points in early 2010. As the yield curve flattens, coupon payments dwindle."

If predicting a single interest rate is—let us say—difficult, divining nonparallel shifts in more than one interest rate is that much more daunting. And it would be daunting even if the Fed hadn't expropriated the curve in the name of economic stimulus. 'Operation Twist,' the central bank's attempt to flatten the curve by selling short-dated Treasurys and buying long-dated ones, may or may not have effected the desired macroeconomic outcome. It did nothing to stimulate the net worth of the holders of steepener bonds.

Steepener bonds

issuer	maturity	par outs. (millions)	year 1 coupon	year 2+ coupon formula	price
Citigroup	2033	$12.0	10%	5.25(cms30-cms5)	94.5
Citigroup	2033	8.0	10	4(cms30-cms5-50bps)	77.85
Goldman Sachs	2028	31.0	9	4(cms30-cms5-20bps)	86.73
Bank of America	2030	23.3	13	4.5(cms10-cms2-13bps)	92.57
Bank of Nova Scotia	2030	6.5	11	4(cms30-cms2-50bps)	94.6

source: The Bloomberg

Worse than a flat curve would be an inverted one. Zero would be one's coupon income if short rates pushed higher than long ones, as they did as recently as the year 2007. A study conducted by the Milken Institute in 2007 found three years in which the two-year Treasury yield exceeded the 10-year for more than 200 days. They were 1979 (all 248 trading days), 1981 (208 out of a possible 249 days) and 2000 (227 out of 251 days). Fortunately for the hypothetical par buyer of steepener bonds, no such securities were then in existence.

Even corporate bonds of conventional issue size are hard enough to trade in this post-Volcker Rule world. Steepeners are for buying and holding, though even the buying part is problematical in the current regulatory environment. "We don't show this product on our retail platform at all, so there would be no way to know about it unless someone asked for a specific CUSIP," an informant at an institutional fixed-income trading desk tells *Grant's* (she asks to go nameless). Warns the very first page of the aforementioned Citigroup prospectus: "You should not invest in the notes unless you are willing to hold them to maturity."

Or, as the regulators have effectively ruled, "you should not invest in steepener notes or bonds, period." Finra's Rule 12-03, "Heightened Supervision of Complex Products," issued in January 2012, has this to say: "[T]he fact that a product is 'complex' indicates that it presents an additional risk to retail investors because its complexity adds a further dimension to the investment decision process beyond the fundamentals of market forces. This may be the case even though the complexity of some products may arise from features that seek to reduce the probability of investment losses in particular situations…If a product has…features of complexity, such as embedded derivative-like features or a structure that produces different performance expectations according to price movements of other financial products or indices, then firms should err on the side of applying their procedures for enhanced oversight to the product." One example of a complex product? Why, steepener bonds, of course.

"And yet," as Grant observes, "the investor who is willing to accept complexity and uncertainty has the chance to attain the rarest of victories in this yield environment: decent income from a single-A credit. Furthermore, steepeners boast a very low duration, which insulates them against a general rise in interest rates (nonparallel shifts in the yield curve are another matter)."

As the bonds are different, so are the prices they command in the secondary market. While the Citi and BofA securities already described are quoted in the low to mid-90s, a 2013 issue of Goldman steepeners ($31 million are outstanding) changes hands at 87. The Goldmans paid a 9% teaser rate (it's come and gone) and calculates quarterly interest payments by the formula, 30-year swaps minus five-year swaps minus 20 basis points times four. On July 31 interest rates, that serves up a coupon of about 4.8% (at an annual rate). The bond caps interest payments at 9.25%.

Other bonds come cheaper: a 2013 Citigroup bond with less advantageous coupon terms can be had for 77.85. The terms are 30-year swaps minus five-

year swaps minus 50 basis points times four; 3.6% is the current coupon rate. The Citis are capped at 10% and—like so many other steepener issues—are callable at par.

How might a holder of these Citi-issued steepeners fare if, in fact, the yield curve did—at long last—steepen? Let's assume that almost three years elapsed before the big interest-rate move and that, along the way, tranquility reigned and the bonds continued to pay an even 3.6%. Then, at year two and three-fourths, long rates spiked well in excess of short rates. Citi, now facing the prospect of paying the 10% maximum coupon rate, would call the issue at par, thereby presenting the holders with a sudden gift of a move from 77.85 to 100. In such a scenario, the holder would have achieved an annual total return of 12.6%.

Conversely, an investor more interested in current income than capital appreciation might consider a $6.5 million issue by the A-plus-rated Royal Bank of Scotland, which matures in December 2030. The bonds offer coupon terms of 30-year swaps minus two-year swaps minus 50 basis points times four, with a maximum rate of 11%. A look at the July 31 CMS term structure shows that if Thursday's rates were used to calculate the next coupon, the payout would compute to an annualized 8.24%. Do you wonder how many bonds out of an issue of only $6.5 million could possibly be for sale? Last Friday, 1,000 were offered at 94.60.

Should the yield curve invert, an investor would, of course, suffer a loss of income as well as a commensurate markdown in the quoted price of his or her bonds. The cessation of coupon payments would present one of those tests of will and character that used to feature in boys' adventure books. Looking on the bright side, the committed believer in the ultimate yield-curve-steepening trade might use the sell-off to build a bigger position. Uninvested opportunists would discover an advantageous entry point.

"Perhaps this is a classic case of going against the masses," Thoreson comments. "If the curve actually inverts, these bonds would drop due to the lack of a coupon…then at a price of, say, 75 these may become growth bonds to the one who believes that the curve won't stay inverted forever."

An inverted yield curve seems about as likely today as a steeply sloped one, which is to say farfetched. We like the odds—and, for as long as it may last, the income.

•