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Long Duration Strategies Using Corporate Bonds – Part 3

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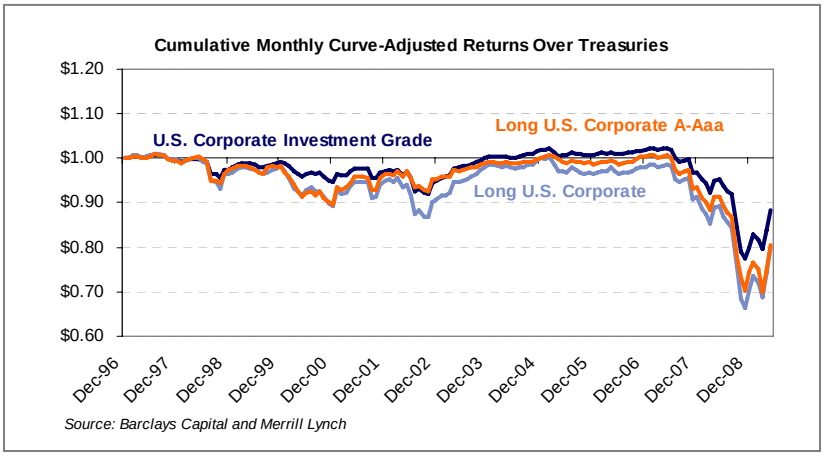
In two prior articles on March 9 and April 27 I offered an opinion about two alternatives that corporate pension plan sponsors confront in implementing a long duration investment strategy using corporate bonds. Rather than investing directly in long duration corporate bonds, I argued, it is preferable to employ a strategy based on a portfolio of corporate bonds benchmarked to a shorter duration broad corporate bond index and supplemented by the use of derivatives (interest rate swaps and/or futures) to extend duration, as needed, depending on one's views about the direction of Treasury yields. I concluded that such a portfolio would be more diversified, more liquid, and quicker to implement. It would also most likely have a lower tracking error to its index and offer more protection against the possible risk of default.

In this article, I focus my attention on the historical spreads (i.e., excess yields above a portfolio of Treasury bonds with similar maturity, duration and interest rate term structure) for each of two alternatives, the Barclays Capital Long Corporate Bond index and the Barclays Capital Broad Corporate Bond index. In particular, I analyzed the portion of the total investment returns of each index that is due to the change in spreads, or the curve-adjusted returns over Treasuries. Finally, I compare these curve-adjusted returns to those of a Long A-Aaa Corporate Bond index, which is a proxy for the liability discount rate used in the calculation of contribution requirements for U.S. corporate pension plans.

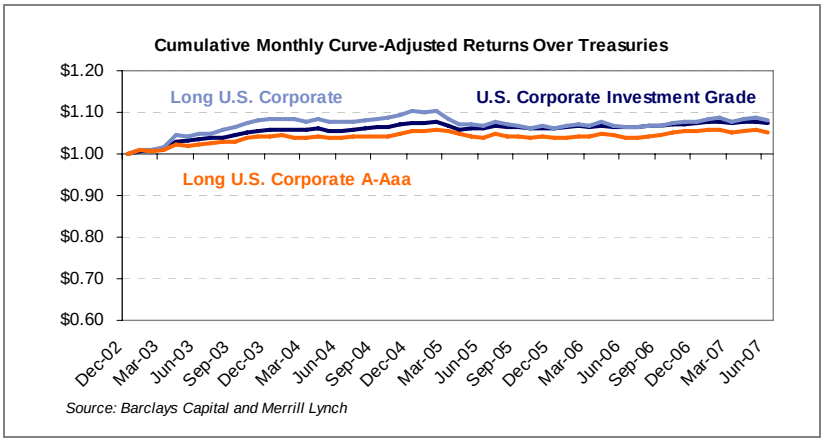
Given that typical pension plan liabilities have durations similar to the Barclays Capital Long Corporate Bond index, a rational starting point would be to assume that investing in long corporate bonds will provide higher curve-adjusted returns and a better hedge against the change in value of the liabilities due to the change in spreads. However, as you can see in Graph 1 on the next page, the broader corporate bond index has provided higher curve-adjusted returns over Treasuries than the long corporate bond index during the January1, 1997 – May 31, 2009 period.

Graph 1: Broad Bond Index Returns Have Topped Those of Long Corporate Bonds



Source: Barclays Capital and Merrill Lynch

Graph 2: Only Rarely Has the Long Bond Index Strategy Outperformed



Source: Barclays Capital and Merrill Lynch

Table 1: Bonds With 10+ Year Maturities Are in Relatively Short Supply

Source: Barclays Capital	Issuances For 2008		Index-Eligible Issuances 2009 Year-to-Date Through 4/16/09	
	All	10+ Year Maturity	All	10+ Year Maturity
Amount ($billions)	$662.7	$174.3	$180.5	$33.3
% of All Index	N/A	26.3%	N/A	18.4%
1. Financial	53.9%	63.0%	7.6%	12.0%
Banks as % of Financials	33.3%	39.7%	36.2%	0.0%
2. Industrial	38.3%	28.7%	80.3%	67.9%
3. Utility	7.8%	8.3%	12.1%	20.1%
4. Total = (1.) + (2.) + (3.)	100.0%	100.0%	100.0%	100.0%

I also broke down these curve-adjusted returns over Treasuries over different time periods:

- January 1, 1997 through December 31, 1999 (i.e., a period of good equity returns);
- January 1, 2000 through December 31, 2002 (i.e., bad equity returns);
- January 1, 2003 June 30, 2007 (i.e., good equity returns);
- July 1, 2007 through February 28, 2009 (i.e., bad equity returns) and
- March 1, 2009 through May 31, 2009 (i.e., good equity returns).

In only two time periods over the last twelve and a half years did the long corporate bond index have higher cumulative monthly curve-adjusted returns over Treasuries. One was during the January 1, 2003 – June 30, 2005 period, as in Graph 2, and the other was in the past two months.

What is not captured by Graph 2 is that it takes a much longer time to build a portfolio of long corporate bonds and, as a result, the recent very good curve-adjusted returns over Treasuries may not have been completely available to investors. This is because 1) the issuance of corporate bonds with maturity of ten years or greater is a small proportion of all corporate bonds being issued and 2) there has been very strong demand for those bonds this year (see Table 1).

Note that only four of those bonds with 10-plus years maturity issued in 2009 were from corporations with a rating above A, with two companies responsible for 89% of the total.

If a manager of a portfolio benchmarked to a long corporate bond index cannot get all the corporate bonds it needs, then the portfolio may have a larger allocation to Treasury securities than anticipated, a shorter duration versus the benchmark and, finally, less spread exposure than desired. Therefore, the resulting portfolio may end up with both a lower return and a higher tracking error versus the benchmark. Also, the portfolio will likely be much less diversified than desired, increasing the negative impact on returns of any defaults.

In summary, investing in broad corporate bonds appears to be a better and more efficient way to get exposure to spreads when desired. If a longer duration portfolio is needed, swaps and/or Treasury futures can be used when Treasury yields reach an equilibrium level, however defined. Therefore, the decisions as to the appropriate level of spread and interest rate exposures can more easily be disaggregated to reflect the investor's tactical views with a portfolio of corporate bonds benchmarked to a shorter duration broad corporate bond index and supplemented by the use of derivatives to extend duration as needed. ■