

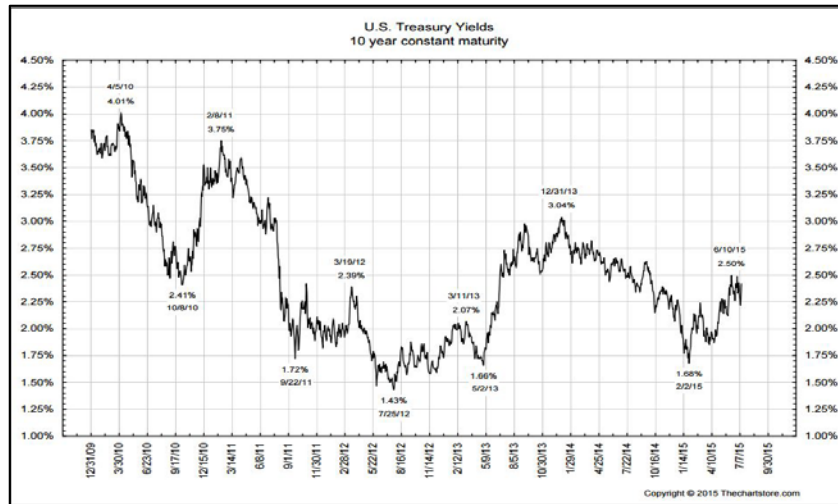
**June 30, 2015****Waiting for the Fed**

Speculation continues regarding the timing of an increase in the Federal Funds rate. Early in the year a move in June was viewed as possible, but weather induced negative growth in the first quarter caused the FOMC to delay action. Discussion now is focused on the fall, but fallout from the Greece induced Euro zone turmoil and China's stock market implosion could again cause the monetary authorities to further postpone taking action.

Ignoring international developments, building U.S. economic momentum (albeit at a moderate pace thus far) and declining unemployment provide an argument for a move, but these trends remain offset to some degree by sluggish wage growth, higher than desired part time employment for economic reasons, a low labor participation rate and a lower than desired inflation rate. There is also a concern that dollar strength relative to the Euro could impact U.S. exports and diminish GDP growth prospects to some extent.

We would not be surprised if the Fed decides to hold off a bit longer on their first move until they have additional evidence of sustainable U.S. growth and witness some calming of the global turmoil. However, we do expect that the first tightening from the near zero Federal Funds rate level that has been maintained since late 2008 will be taken in the not-too-distant future. Fed Chair Yellen has indicated that a move this year is probable.

We anticipate the Fed's first move will be well announced and subsequently evaluated before additional moves are made. We also expect that an increase in short rates will cause some modest pressure on the longer component of the yield curve. As shown in the chart below, the ten year Treasury yield rose from a low of 1.68% in early February of this year to 2.50% in June in response to quickening economic activity and the expectation of a Fed move. This benchmark rate temporarily declined in the closing days of last month as investors opted for safe harbor investments in response to global developments, but has again moved higher. A move above the 2.50% level would not be surprising as conditions settle. We are therefore maintaining relatively low portfolio durations. Principal protection remains a major focus in our management of client assets.



### Municipal Supply/Demand

A heavy supply of refunding bonds in the first four months of the year pushed issuance to an annual rate near \$450 billion. The pace of new issue sales declined in the past two months and volume in the first half totaled a still large \$217 billion. We anticipate that sales will continue to moderate in the second half and total perhaps \$380 billion for the year. With demand for tax exempt securities remaining strong, we expect that this volume will be absorbed with little difficulty.

As is typical, the trend in tax-exempt rates followed the Treasury market’s lead with the lows reached in late January and highs in mid-June. This pattern is displayed in the following table:

#### Prime Municipal Yields

|          | 1/30/15 | 3/30/15 | 6/10/15 | 7/09/15 |
|----------|---------|---------|---------|---------|
| 1 Year   | 0.15%   | 0.23%   | 0.31%   | 0.30%   |
| 5 Years  | 0.95    | 1.21    | 1.59    | 1.32    |
| 10 Years | 1.74    | 1.99    | 2.43    | 2.33    |
| 15 Years | 2.13    | 2.44    | 2.89    | 2.81    |
| 20 Years | 2.34    | 2.66    | 3.14    | 3.05    |
| 30 Years | 2.49    | 2.89    | 3.36    | 3.31    |

Municipal mutual fund outflows have been persistent over the past two months, likely reflecting investor credit concerns (e.g. Puerto Rico) and the desire to avoid the principal risk inherent in most funds in a rising rate environment.

### Puerto Rico Update

The commonwealth’s continuing recession, declining population due to outmigration and budgetary deficits have created an unsustainable fiscal environment. With \$72 billion debt outstanding, debt per capita is more than ten times the average of the fifty states and the island’s public debt as a percent of 2013 personal income reached 87.5% according to Moody’s. Puerto Rico’s governor, Alejandro Padilla recently stated that the commonwealth’s debt is not payable and a broad restructuring of its obligations will be necessary.

Income from Puerto Rico securities is exempt from federal, state and local income tax due to the commonwealth's territorial status. Investors focused on tax avoidance have therefore long been attracted to Puerto Rico debt. This includes many mutual funds, including in single state funds that seek to provide investors residing in a given state with income that is exempt from federal, state and, where applicable, local taxation.

Puerto Rico sold \$3.5 billion 8% GO bonds due in 2035 in March of last year at a dollar price of 93 to yield 8.73%. The bonds, now rated Caa3/CCC- by Moody's and S&P with negative outlooks by both services, recently traded at 69.75 and yield over 12%.

An effort is underway in the U.S. Congress to allow Puerto Rico, which is currently restricted from utilizing the bankruptcy code because of its commonwealth status, to engage in a Chapter 9 bankruptcy restructuring as Detroit did. Whether this effort proves successful remains to be seen.

C.W. Henderson has never purchased Puerto Rico securities and has always liquidated commonwealth bonds when new accounts were funded with these securities. Despite C.W. Henderson's lack of exposure, we are mindful that credit stress in one market sector can influence the trading characteristics of other bonds. Adherence to high credit standards and continuing credit research is critical in this environment.

### **Impact of Rising Rates**

As noted above, we anticipate that the Federal Reserve will begin to increase interest rates within the next several months. What impact might this have a typical C.W. Henderson traditional product portfolio? No portfolio is totally immune from rising interest rates, but the defensively structured accounts we manage should be relatively insulated, especially in an environment where tightening occurs gradually.

A key factor in our risk control process is the use of barbell structured portfolios that have large account components invested bonds with very limited effective durations. These holdings are coupled with longer, higher yielding securities. Four strategies are employed: High coupon bonds with very short calls; fifteen to eighteen month bonds that roll down the yield curve and are sold when maturities decline to about a year; high coupon bonds with intermediate calls (e.g. 5 year calls); and longer securities, typically eleven to fourteen year maturity bonds with nine to ten year calls. High coupon bonds (e.g. 5.0%) are favored to avoid de minimis risk.

Assume a parallel shift in the yield curve over a year with 25 basis point yield increases each quarter. What would be the impact on each of the strategies we employ?

**High coupon bonds with short calls:** These securities experience little price impact when rates rise as they are priced to short calls. Assume that a 5% bond due in five years with a 6 month call at par is purchased at a 0.40% yield to call. The dollar price of the bond would approximate 102.30. Over the next six months the premium will amortize to 100 resulting in a principal decline of 2.30%. However half of the coupon (2.50%) will be collected resulting in a net 0.20% return – 0.40% annualized. If the bond is not called, the return for the following six months would be 2.50% resulting in an annual return of 2.70%. As interest rates rise, the likelihood of these bonds being called declines. Therefore, limited price risk, but significant upside potential.

**Fifteen to eighteen month bonds:** We typically can purchase these securities at 25 to 30 basis point yield increments relative to one year securities. Assuming a 25 basis point rate rise each quarter, the roll down the

yield curve over a three month period would be comparable to the rate increase. The dollar price impact on these securities would be modest.

High coupon bonds with intermediate calls: An example would be a nine year maturity bond with a 5% coupon that is callable in five years and currently priced at 1.70% yield to call, dollar price of 115.75. A year later the bond will be priced to a four year call. Assuming a 2.50% yield to the shortened call date, the dollar price would fall to 109.46, a decline of 5.4%.

Long bonds: High coupon fourteen year bonds with ten year calls can currently be purchased at about 3.00% YTC. A 5.0% bond would have a dollar price of 1117.17. Assume a 3.90% yield to the nine year call a year later and the dollar price declines to 108.28, a decline of 7.5%.

At the end of June the traditional product accounts we manage held, on average, 4% cash while 46% of account assets was invested in high coupon bonds with short calls and fifteen to eighteen month securities. The remainder the portfolio was invested in bonds with intermediate calls and long bonds. Using the assumptions above, the negative impact on a typical account's principal value would be about 3 1/2% as the two short strategies suffer little, if any, price deterioration and cushion the pressure experienced on the entire portfolio. Income flows from 5.00% coupons would more than offset the longer bond principal declines and produce positive total returns.

This analysis assumes a static environment. Active management involving duration adjustments and advantageous trades has the potential to temper declines. In addition, resulting tax losses in the longer bond component of the portfolio would be harvested by swapping these securities into similar bonds. Depending on whether the capital losses are short term or long term and assuming the highest marginal rates, principal losses stemming from rising interest rates would be offset by 43.4% or 23.8% (including the supplemental health care gains tax), respectively. If short term capital losses are captured in the long bond component, the tax adjusted principal decline in these bonds is reduced from 7.50% to 4.25% ( $7.50 \times (1.0 - 0.434)$ ).

### **Negative Convexity**

Current coupon, long maturity bonds with short calls have terrible risk/return characteristics. For example, consider a thirty year bond with a 3.75% coupon and a four par year call that is trading at 3.40%. The bond would be priced to the call and have a dollar price of 101.30. Should rates decline by 1.00% over a year the bond will be priced to the three year call and the dollar price would rise to 103.88, an increase of 2.55%. In contrast, should yields rise by 1.00% over a year the bond would be priced to the maturity date and likely yield about 4.40%. The dollar price would fall to about 86 due to both the rate increase and the fact that the bond would be evaluated at a level well below par and therefore subject to de minimis pricing (i.e. a purchaser would be subject to ordinary income tax on the bond's subsequent price appreciation back to par). Negatively convex bonds should always be avoided, especially in the current low rate environment where rate increases are more probable than additional rate declines. Negatively convex bonds included in new accounts funded with existing securities are expeditiously swapped for securities with more favorable risk/return structures.

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