Treasury yields whipsawed with disappointing economic data to begin the week and stronger than expected labor data to end it. Muni yields little changed - short-end ratios fall.

Bottom Line:
- Treasury yields whipsawed before ending higher on the week.
- Muni yields were little changed.
- Muni fund see inflows – 26th consecutive week.
- Lack of state budget enactment illustrate weak governance (Moody’s)
- Higher education sector medians stressed (Moody’s)
- Independent schools’ credit in good shape (Moody’s)
- S&P Puerto Rico Total Return Index was +0.2% last week (+9.3% YTD).

What Happened in the Bond Markets Last Week?
- Treasury yields began the week moving smartly lower (~10 bps in 10-yr space) but abruptly reversed on Friday with the better than expected labor report on Friday after which yields sold off hard. The pre-labor report economic data continued to be on the weaker side. However, the weak jobs figures from the previous month was not repeated (again) in the June print putting into question the rationale for cutting rates on July 31st. Nonetheless, the market-implied probability for a cut remains near certainty (at 98.5%) at the July meeting and at about 70% for a second rate cut by September’s meeting.
- Municipal bonds’ yields were little changed.

Yields (Figure 1):
- During the past week ending 7/5, the Treasury curve bear-flattened; 2-year Treasury Note yields +11.4 bps to 1.88%, 5-year Notes yields +6.8 bps to 1.83%, 10-year Notes yields +3.1 bps to 2.04% and 30-year bonds yields +0.6 bps at 2.54%.
- Municipal Index curve yields were little changed; AAA-rated GO yields 2-year bonds -1 bps to 1.28%, 5-year bond yields were unchanged at 1.33%, 10-year bond yields -1 bps to 1.61% and 30-year bonds unchanged at 2.39%.
- The 10yr AAA GO Ratio ended at 79.6.
One can observe these changes by looking at how rates have changed along the curve for both the Treasury curve and for the AAA-rated G.O. Index since last week. The top panel shows four yield curves; two for the Treasury curve - one for the most current date and one from last week and two for the AAA-rated G.O. - current and last week. The bottom panel of the graph shows changes in the rates along both curves for the week for both Treasuries and the AAA G.O. Index.
Supply (Figure 3) – Bloomberg 30-Day Visible Supply currently stands at $1.1 billion down from $4.8 billion this time last week. The YTD average visible supply is $8.9 billion and the 12-mo average is $9.0 billion.

Articles of Interest

Late State Budgets Show Weak Governance (Moody’s): In Sector Comment Moody’s described late budget enactment as a sign of governance weakness which if continued to the extreme could result in a downgrade. Seven states (MA, NH, NC, OH, OR, RI and WI) did not have full budgets as of the new fiscal year. Several of the budget battles revolve around debates concerning environmental spending, social policy priorities and educational funding.
Higher Education Medians (Moody's): Moody’s issued two Sector Profiles on the Higher Education sector, the highlights for each include:

- **Public:** 1) challenges remain around muted revenue growth (down to 2.4% in 2018) and resultant cost containment efforts (which still grew 3% in 2018); 2) small and moderately sized public universities are having the most difficulties (only growing 1.5-1.8%) as larger universities outperformed; 3) median enrollment fell slightly after four years of low growth; 4) total cash and investments are solid and growing, 5) debt leverage remains manageable even as median debt rose by 5%; 6) retirement liabilities remain a credit challenge.

- **Private:** 1) median revenue growth trailed expense growth and operating performance continued to thin; 2) small private universities continued to struggle more revenue growth of just 1.1% than larger (4.8% revenue growth); 3) net tuition revenue declines are increasingly being reported reflecting a competitive market; 4) financial reserves continue to increase despite the difficulties driven by strong investment performance and philanthropy; 5) capital investment continues surpass growth in debt.

Independent Schools in Good credit Shape (Moody's): Moody’s issued a Sector Profile report on the state of independent schools median credit metrics. The highlights of the report include: 1) student demand remains steady and allows for predictable tuition revenues; 2) operating performance remains healthy (median surplus of 4.6% and median cash flow margins of >20%), 3) balance sheets’ strengthened in 2018 from investment performance, philanthropy and operating cash flow; 4) donor support remained strong and bridges the gap between the cost per student of >$56k and net tuition of $37k.

Puerto Rico
- **The S&P Municipal Bond Puerto Rico Index** finished at 194.9 on Friday vs. 194.6 at the end of the previous week, +0.2% (+9.3% YTD)
Relative Value by Maturity

Table 1 - AAA Muni Ratios and Spreads by Maturity - Data Source: Bloomberg

<table>
<thead>
<tr>
<th>Maturity (yrs.)</th>
<th>Yield-to-worst (%)</th>
<th>0% Tax Rate</th>
<th>35% Tax Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AAA Gen. Oblig.</td>
<td>Treasury</td>
<td>Spread (bps)</td>
</tr>
<tr>
<td>1</td>
<td>1.26</td>
<td>1.97</td>
<td>-71.1</td>
</tr>
<tr>
<td>2</td>
<td>1.27</td>
<td>1.85</td>
<td>-58.1</td>
</tr>
<tr>
<td>3</td>
<td>1.28</td>
<td>1.80</td>
<td>-52.1</td>
</tr>
<tr>
<td>4</td>
<td>1.30</td>
<td>1.81</td>
<td>-51.1</td>
</tr>
<tr>
<td>5</td>
<td>1.32</td>
<td>1.83</td>
<td>-50.9</td>
</tr>
<tr>
<td>7</td>
<td>1.41</td>
<td>1.92</td>
<td>-50.5</td>
</tr>
<tr>
<td>10</td>
<td>1.60</td>
<td>2.03</td>
<td>-43.4</td>
</tr>
<tr>
<td>15</td>
<td>1.97</td>
<td>2.22</td>
<td>-24.9</td>
</tr>
<tr>
<td>20</td>
<td>2.14</td>
<td>2.32</td>
<td>-18.7</td>
</tr>
<tr>
<td>25</td>
<td>2.31</td>
<td>2.43</td>
<td>-11.9</td>
</tr>
<tr>
<td>30</td>
<td>2.38</td>
<td>2.54</td>
<td>-16.3</td>
</tr>
</tbody>
</table>

Figure 4 – AAA General Obligation Ratios and Spreads – Data Source: Bloomberg
Relative Value by Rating

Figure 5 – Muni Index Yield Curve by Credit Rating – Data Source: Bloomberg

For more information please contact your Financial Advisor.
Appendix – Important Disclosures

Some of the potential risks associated with fixed income investments include call risk, reinvestment risk, default risk and inflation risk. Additionally, it is important that an investor is familiar with the inverse relationship between a bond’s price and its yield. Bond prices will fall as interest rates rise and vice versa.

When considering a potential investment, investors should compare the credit qualities of available bond issues before they invest. The two most recognized rating agencies that assign credit ratings to bond issuers are Moody's Investors Service (“Moody's”) and Standard & Poor's Corporation (“S&P”). Moody's lowest investment-grade rating for a bond is Baa3 and S&P's lowest investment-grade rating for a bond is BBB-. Ratings are measured on a scale that ranges from AAA or Aaa (highest) to D or C (lowest).

The Bond Buyer 20-Bond Index consists of 20 general obligation bonds that mature in 20 years. The average rating of the 20 bonds is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA. The Bond Buyer 11-Bond Index uses a select group of 11 bonds in the 20-Bond Index. The average rating of the 11 bonds is roughly equivalent to Moody's Aa1 and S&P's AA-plus. The Bond Buyer Revenue Bond Index consists of 25 various revenue bonds that mature in 30 years. The average rating is roughly equivalent to Moody's A1 and S&P's A-plus. The indexes represent theoretical yields rather than actual price or yield quotations. Municipal bond traders are asked to estimate what a current-coupon bond for each issuer in the indexes would yield if the bond was sold at par value. The indexes are simple averages of the average estimated yields of the bonds, are unmanaged and a direct investment cannot be made in them.

This is not a complete analysis of every material fact regarding any sector, municipality or security. The opinions expressed here reflect our judgment at this date and are subject to change. The information has been obtained from sources we consider to be reliable, but we cannot guarantee the accuracy. Municipal securities investments are not appropriate for all investors, especially those taxed at lower rates. The alternative minimum tax (AMT) may be applicable, even for securities identified as tax-exempt. It is strongly recommended that an investor discuss with their financial professional all materially important information such as risks, ratings and tax implications prior to making an investment. Past performance is not a guarantee of future results.

This report does not provide recipients with information or advice that is sufficient on which to base an investment decision. This report does not take into account the specific investment objectives, financial situation, or need of any particular client and may not be suitable for all types of investors. Recipients should consider the contents of this report as a single factor in making an investment decision. Additional fundamental and other analyses would be required to make an investment decision about any individual security identified in this report.

ADDITIONAL INFORMATION ON SECURITIES MENTIONED HEREIN IS AVAILABLE UPON REQUEST BY CONTACTING YOUR BAIRD INVESTMENT PROFESSIONAL.