

# Bonds for the Long Term

April 13, 2017

Fixed income investors are questioning whether it is a good time to invest in bonds. By their nature, the prices of bonds react inversely to the changes in interest rates; therefore, if interest rates rise, the price of the bond will fall. Specific security characteristics such as duration, call provisions, credit quality and convexity may make one bond's price fluctuations more volatile than those of another. In general, the above rule holds true for most fixed income securities.

- **Based on our analysis, we believe that a rise in interest rates may not have as negative an impact as one might expect on diversified fixed income annualized total returns over a three-year time horizon.**
- **Coupon income provides a "cushion" which partly mitigates the impact of declining prices.**
- **Historical data suggests that rising interest rates do not necessarily lead to negative total returns over shorter time periods for diversified fixed income portfolios.**

To better understand the relationship between changes in interest rates and bond price volatility, we examined historical quarterly returns for various Bloomberg Barclays Indices. For the purposes of this commentary, we focused on two primary indices -- the Bloomberg Barclays 10-Year Municipal Index and the Bloomberg Barclays Aggregate Bond Index. As a proxy for interest rate changes in the bond market, we used changes in the 10-year Treasury Yield. In line with our expectations, the negative return quarters were accompanied by an upward shift in the 10-year Treasury Yield. Conversely, declines in the 10-year Treasury Yield were associated with positive returns. The following four charts show the correlation between increases in the 10-year Treasury Yield and the quarterly Index returns. Furthermore, they illustrate that the number of negative Index return quarters is significantly less than the periods where the 10-year Treasury Yield rose.

- Over the past 30 years, the Bloomberg Barclays 10-Year Municipal Index has experienced 26 negative return quarters, while the 10-year Treasury Yield rose in 58 quarters. *(See chart 1.)*
- Over the past 30 years, the Bloomberg Barclays Aggregate Index has experienced 27 negative quarters, while the 10-year Treasury Yield rose in 58 quarters. *(See chart 2.)*

A review of the quarterly rolling 3-year time-weighted annualized returns for the indices highlights the benefits of a long-term fixed income investment strategy:

- During the past 30 years, the Bloomberg Barclays 10-Year Municipal Index has experienced positive returns for all quarterly rolling 3-year time periods. *(See chart 3.)*
- During the past 30 years, the Bloomberg Barclays Aggregate Index has experienced positive returns for all quarterly rolling 3-year time periods. *(See chart 4.)*

## In Summary

While there may be periods of quarterly or annual negative returns, a 3-year time horizon has historically resulted in positive returns. In large part, this can be attributed to the fact that income and reinvestment represent a significant component of total return, which tends to mitigate the impact of adverse price movements. This theory is consistent with McDonnell's philosophy that a commitment to fixed income securities should be a long-term strategy compatible with the investor's time horizon and volatility tolerances.



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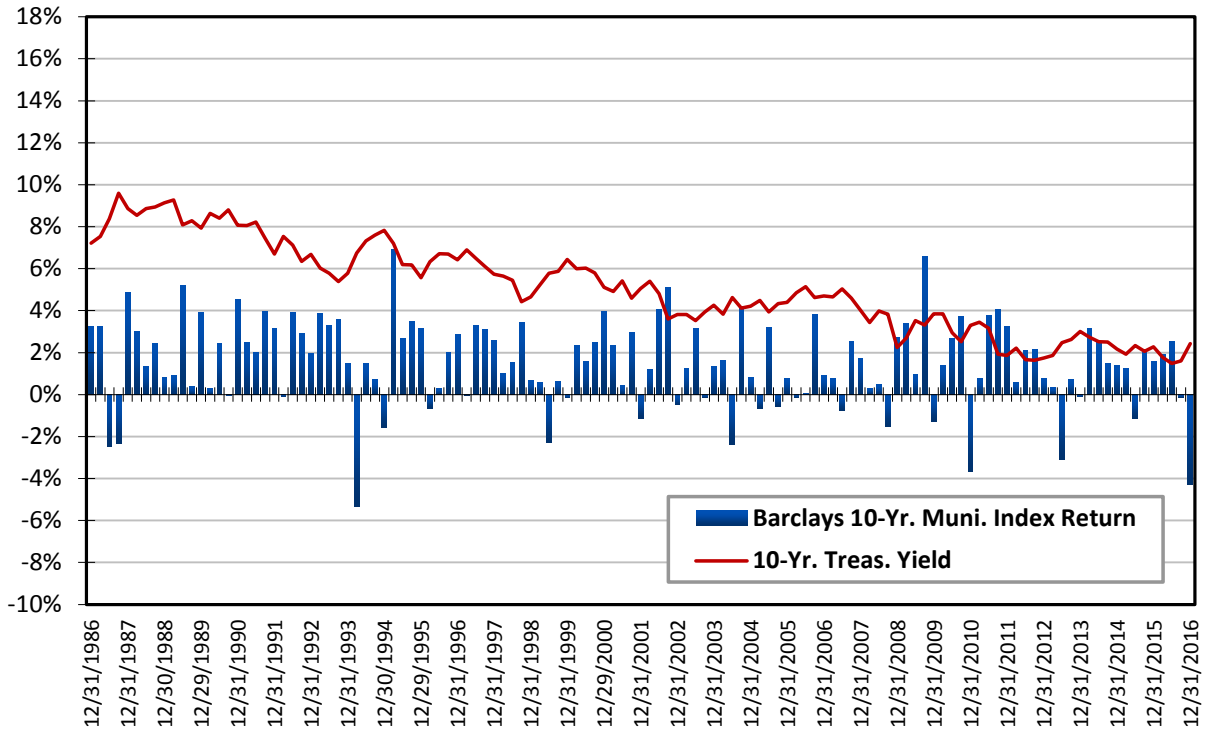
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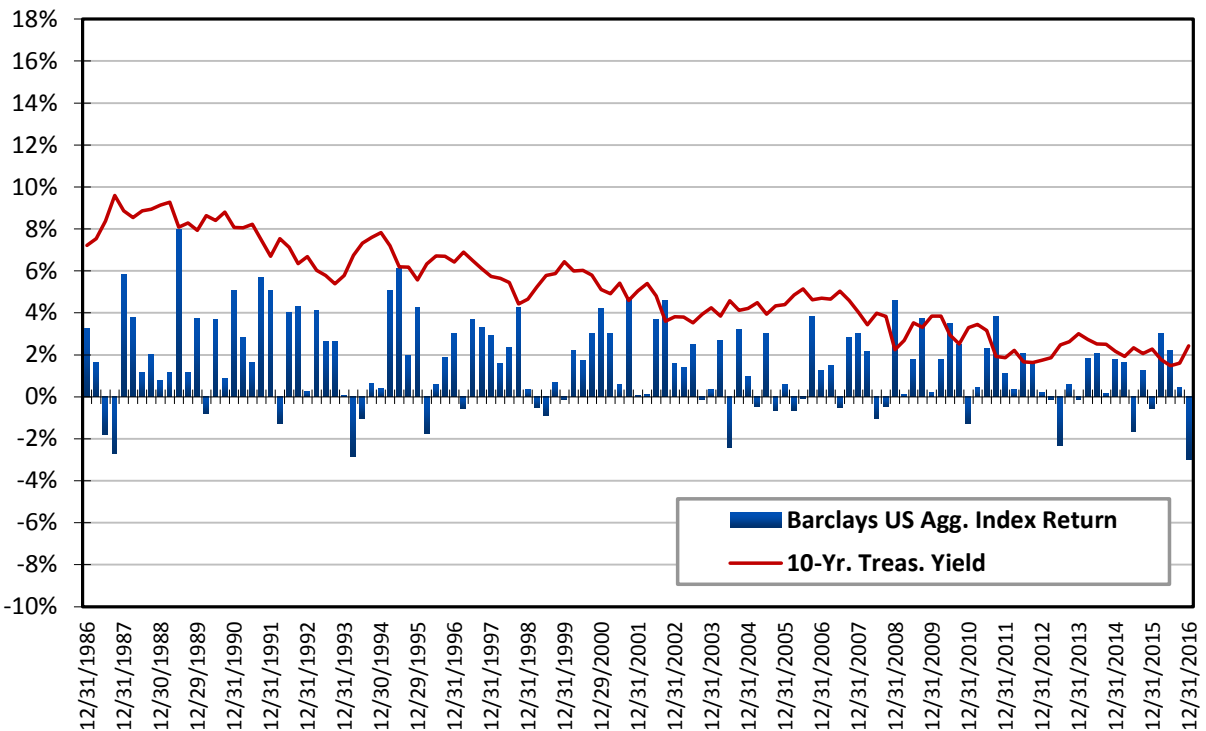
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**CHART 1:**  
**Bloomberg Barclays 10-Year Municipal Index\* vs. 10-Year Treasury Yield**  
**Quarterly 12/31/1986 through 12/31/2016**

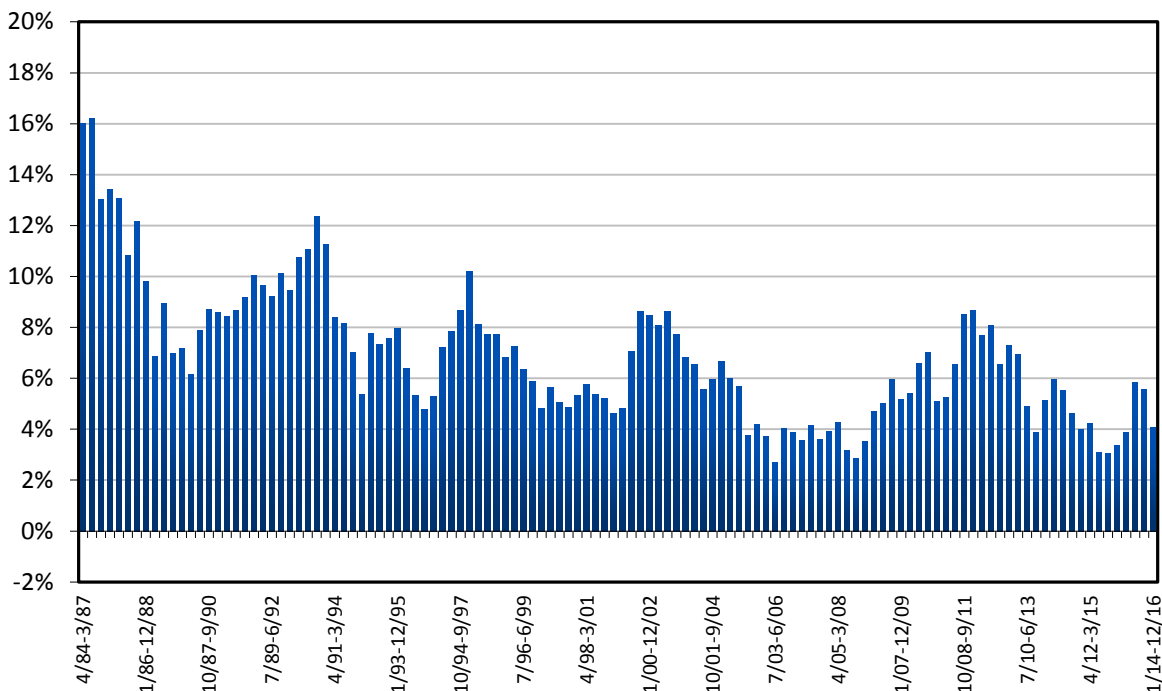


**CHART 2:**  
**Bloomberg Barclays US Aggregate Index\* vs. 10-Year Treasury Yield**  
**Quarterly 12/31/1986 through 12/31/2016**

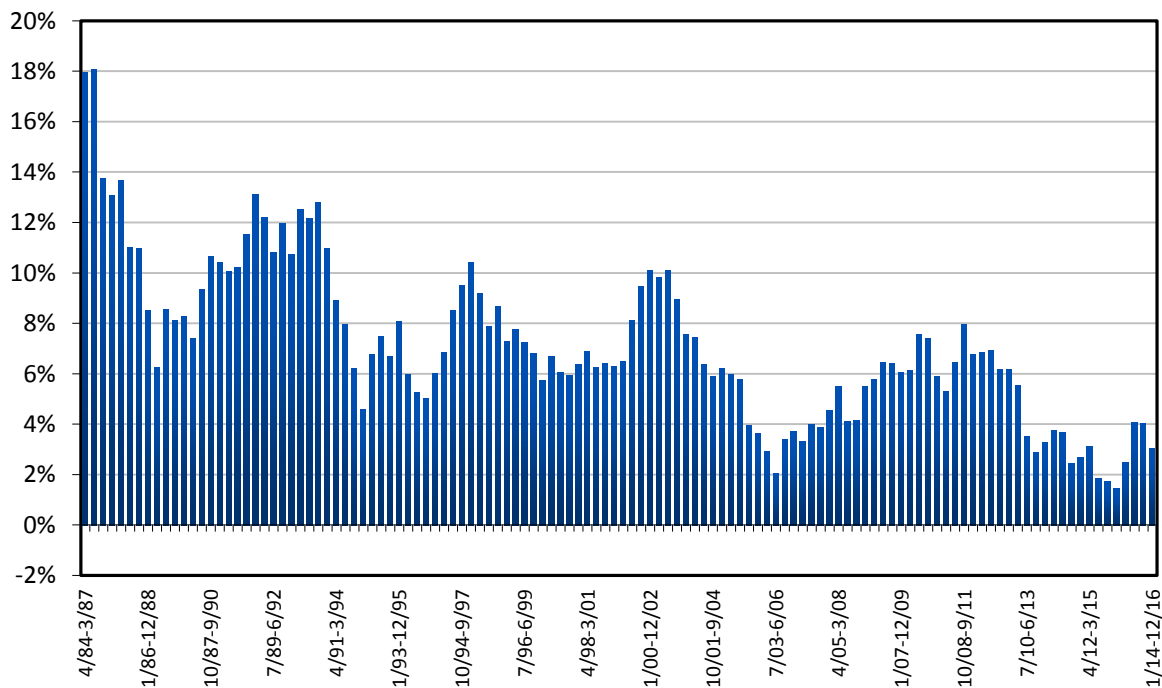


\* The return data for the Bloomberg Barclays Indices were analyzed based on the time period of 12/31/1986 through 12/31/2016. The Indices are unmanaged include the reinvestments of dividends/interest and other earnings and do not reflect any fees or expenses. McDonnell believes the data to be reliable but does not make any representations as to its accuracy or completeness. It is not possible to invest directly in the Index. Sources: Bloomberg Barclays; McDonnell Investments.

**CHART 3:**  
**3-Year Time Weighted Annualized Returns through 12/31/2016**  
**Bloomberg Barclays 10-Year Municipal Index**



**CHART 4:**  
**3-Year Time Weighted Annualized Returns through 12/31/2016**  
**Bloomberg Barclays US Aggregate Index**



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