MONDAY, DECEMBER 26, 2017

MARKET VIEW

FIXED INCOME: A PLAYBOOK FOR RISING RATES

Which types of taxable bonds historically have fared best in rising interest-rate environments?

TABLE 1. HISTORICALLY, LOWER-DURATION, CREDIT-SENSITIVE BONDS HAVE PERFORMED WELL IN PERIODS OF RISING LONG-TERM U.S. TREASURY YIELDS

INDEX RETURNS DURING PERIODS OF INCREASES GREATER THAN 100 BASIS POINTS IN THE 10-YEAR U.S. TREASURY YIELD (MONTH-END ANNUALIZED RETURNS)

Period	10-Year U.S. Treasury[1]	Bloomberg Barclays Aggregate[2]	IG Corporate Floating Rate Notes[3]	Short-Term Corporates[4]	Floating Rate Loans[5]	High-Yield Bonds[6]	Global High Yield[7]	Convertible Bonds[8]	S&P 500[9]
09/30/1993 – 11/30/1994	-8.90%	-3.00%	—	2.10%	11.30%	1.20%	—	-2.70%	1.80%
01/31/1996 – 08/31/1996	-6.00%	-1.80%	—	1.70%	4.80%	3.10%	—	5.40%	3.90%
09/30/1998 – 01/31/2000	-7.70%	-0.60%	—	4.20%	4.90%	3.70%	5.16%	41.40%	28.30%
06/30/2005 – 06/30/2006	-5.80%	-0.80%	4.60%	2.30%	6.70%	4.70%	5.92%	9.40%	8.60%
12/31/2008 – 12/31/2009	-9.90%	5.90%	8.80%	21.30%	44.90%	57.50%	61.98%	49.10%	26.50%
08/31/2010 – 03/31/2011	-6.10%	-0.80%	1.60%	2.30%	7.40%	10.30%	11.57%	19.20%	27.80%
07/31/2012 – 12/31/2013	-6.20%	-1.10%	1.80%	3.20%	7.00%	9.50%	17.50%	22.90%	25.70%
06/30/2016 – 12/31/2016	-7.50%	-2.50%	1.20%	0.60%	5.40%	7.50%	5.70%	8.30%	8.10%

Source: Morningstar.

[1]FTSE 10-Year Treasury Bond Index. [2]Bloomberg Barclays U.S. Aggregate Bond Index. [3]Bloomberg Barclays U.S. Floating Rate Note Index. [4]ICE BofAML U.S. Corporate BBB-Rated 1-3 Year Index. [5]Credit Suisse Leveraged Loan Index. [6]ICE BofAML U.S. High Yield Master II Constrained Index. [7]ICE BofAML Global High Yield Index. [8]ICE BofAML U.S. Convertible Index. [9]S&P 500® Index.

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As we approach yearend, investors may be taking a fresh look at their fixed-income allocations. Once again, a common question of the last several years is on their minds: what will happen to my bonds when interest rates go up?

This was a prevalent concern a year ago when rates spiked after the U.S. presidential election. In the closing days of 2017, that concern is resurfacing, as signs of stronger U.S. economic growth—with the potential for a further boost from changes to the U.S. tax code—have some market observers calling for higher rates. Indeed, the yield on the 10-year U.S. Treasury note is now approaching 2.5%, according to Bloomberg data, up over 40 basis points (bps) from recent lows in early September.

We think it's helpful to frame the discussion of the impact of rising rates in terms of the type of rates we're talking about (short-term versus long term) as well as the specific categories of bonds that investors may own. We believe there are two key questions at the heart of this discussion. Should bond investors focus on moves in longer-term rates, which have a greater impact on the broader bond market? Or should they be watching changes in the overnight rates directly controlled by the U.S. Federal Reserve (Fed)—namely, the fed funds rate—which have a more pronounced effect on short-term bonds? Here, we'll examine both scenarios. As we have illustrated previously, not all bonds respond in the same way to rising rates.

TABLE 2. SHORT CREDIT AND FLOATING-RATE BONDS HISTORICALLY HAVE PERFORMED WELL WHEN THE FED TIGHTENS

INDEX RETURNS DURING PERIODS OF RISING FED FUNDS RATES (MONTH-END RETURNS)

Period	Bloomberg Barclays Aggregate[1]	2-Year U.S. Treasury[2]	10-Year U.S. Treasury[3]	Short-Term Corporates[4]	Short-Term CMBS[5]	Short-Term ABS[6]	IG Corporate Floating Rate Notes[7]	Floating Rate Loans[8]
12/15/1986-09/04/1987	-0.40%	2.45%	-6.32%	3.12%				
03/28/1988-02/24/1989	3.41%	4.13%	2.47%	5.73%				
02/03/1994-02/01/1995	-2.04%	1.16%	-7.11%	1.69%				9.33%
06/29/1999-05/16/2000	2.02%	2.81%	-0.25%	3.48%	3.46%	4.53%		3.06%
06/29/2004-06/29/2006	2.99%	1.51%	1.87%	2.42%	2.41%	2.88%	3.51%	5.92%
12/15/2015-12/20/2017	2.77%	0.37%	0.58%	2.10%	1.50%	1.61%	2.06%	7.04%

[1]Bloomberg Barclays U.S. Aggregate Bond Index. [2]FTSE Two-Year Treasury Benchmark (On-the-Run) Index. [3]FTSE 10-Year Treasury Bond Index. [4]ICE BofAML U.S. Corporate BBB-Rated 1-3 Year Index. [5]Bloomberg Barclays 1-3.5 Year CMBS Index. [6]ICE BofAML ABS Fixed Rate 0-3 Year Index. [7]Bloomberg Barclays U.S. Floating Rate Note Index. [8]Credit Suisse Leveraged Loan Index.

Past performance is no guarantee of future results. Performance during other time periods may have been different or negative. Other indexes may not have performed in the same manner under similar conditions. Indexes are unmanaged, do not reflect the deduction of fees and expenses, and are not available for direct investment. For illustrative purposes only and does not represent the performance of any specific portfolio managed by Lord Abbett or any particular investment.

LONG-TERM RATES

What types of fixed-income investments historically have done well during periods of rising long-term Treasury yields? While it has often been said that there has been a 30-year bull market in bonds, a period marked by a long, general decline in interest rates, there have been several episodes of significant increases in yields on U.S. government bonds within that period. Many *Market View* readers will be familiar with Table 1, which illustrates the performance of various bond categories during the last eight periods when the yield on the 10-year Treasury rose by 100 bps or more.

Table 1 shows that as long-term rates rise, longer-duration government-related securities tend to suffer the most. Each of these periods led to negative returns for the 10-year Treasury note, as higher yields translated to lower prices, with an average loss of 7.3% during these eight periods. It should come as no surprise that the Bloomberg Barclays U.S. Aggregate Bond Index, which now has an effective duration of 6.0 years and is largely comprised of U.S. Treasuries and government-related securities, also generated losses in seven of these eight periods.

Which asset classes historically have done well during periods of rising long-term Treasury yields? Lower-duration and more credit-sensitive bonds: for example, short-term corporate bonds, high-yield corporate bonds, and floating-rate bank loans posted positive returns in all eight periods. Stocks were positive in every period, while convertible bonds were positive in all periods but one.

What might lie behind this performance? As we have pointed out before, higher Treasury rates often coincide with an improving economy, which may lead to a rise in corporate earnings, better credit fundamentals, and increasing investor appetite to take on risk, resulting in declining credit spreads. That spread compression, along with the higher income generated by these securities, can help offset the move higher in Treasury rates.

Short-term corporate bonds feature far lower duration than longer maturity securities. As a result, short-term bond prices are relatively stable during periods of volatility in interest rates (or in credit spreads).

With that in mind, what might fixed-income investors do to protect against the risk of the potential for further increases in long-term interest rates?

- They might consider adding equity-related and credit-sensitive fixed-income sectors (high-yield, bank loans, convertible bonds); or
- Those who prefer investment-grade strategies may want to reduce the duration of their portfolio via short- or ultra short-term fixed-income strategies.

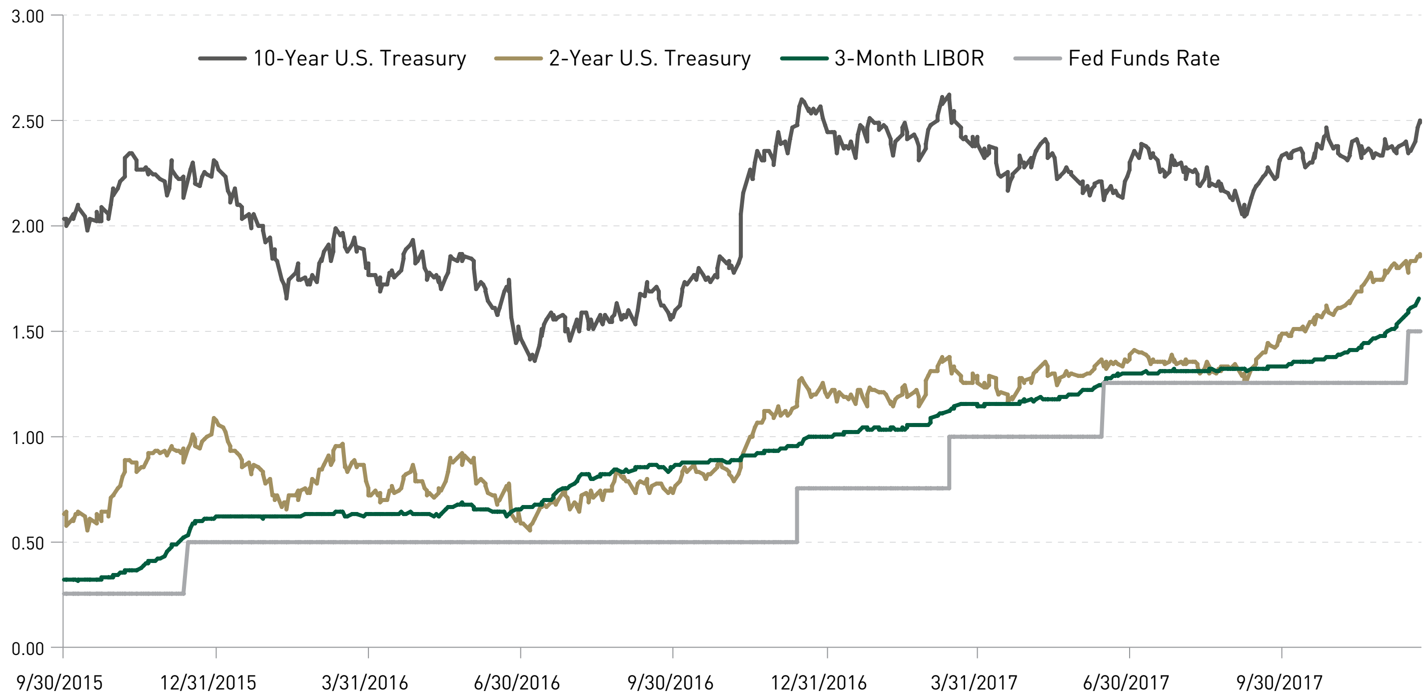
SHORT-TERM RATES

Let's move on to our second interest-rate question: What happens when the Fed raises short-term rates? In past discussions on the data in Table 1, specifically about the performance of short-term corporate bonds, we have heard concerns about how short-term bonds may perform during periods when the Fed is hiking the fed funds rate. Many investors assume that when the Fed raises short-term rates and the yield curve flattens, shorter-maturity securities will suffer.

Here, again, a look at recent market history may be in order. How have various segments of the bond market performed during periods rising short-term rates spurred by Fed tightening? Table 2 summarizes the performance of various asset classes during the last six cycles of Fed tightening, including the current instance.

CHART 1. SHORT RATES HAVE INCREASED SIGNIFICANTLY MORE THAN LONG RATES

YIELD (IN PERCENT; TARGET RATE ON FED FUNDS) ON INDICATED BENCHMARKS, SEPTEMBER 30, 2015–NOVEMBER 30, 2017



Source: Bloomberg data for U.S. Treasury securities and LIBOR; U.S. Federal Reserve for fed funds rate.

Performance quoted above is historical. **Past performance is not a reliable indicator or guarantee of future results.** The historical data are for illustrative purposes only, do not represent the performance of any specific portfolio managed by Lord Abbett or any particular investment, and are not intended to predict or depict future results.

Why might short-maturity bonds remain positive even as the Fed pushes short rates higher? The common fear is that Fed tightening will lead to a flattening of the yield curve, and short-maturity bonds will suffer negative returns. While short-term yields do tend to rise more than long-term yields during Fed tightening cycles, you have to look at the impact on performance: since they are shorter in duration, the move in yield has a more muted impact on prices of short-maturity bonds. The income generated, therefore, is a large component of total return.

As a result, two-year U.S. Treasury bonds have generated positive returns in each of these six periods. But the most compelling performance story during Fed tightening cycles is found in the other asset classes detailed in Table 2:

- *Short-term corporate bonds* had positive returns in every period, well ahead of those for both the two- and 10-year Treasuries. Why? Curve flattening means short-term rates go up, but due to the securities' low duration, prices do not move much. Here, higher income translates into higher total return.
- *Short-term commercial mortgage-backed securities (CMBS)* and asset-backed securities (ABS) posted similar results to short-term corporates, though the representative indexes have shorter histories.
- *Securities with floating-rate coupons* don't have duration, so their prices experience virtually no impact from rising rates. They actually benefit from higher rates, as their coupons adjust upward. Historically, bank loans have been one of the best asset classes to own during Fed tightening cycles.
- For those who find floating-rate appealing, but prefer investment-grade securities, *floating rate notes* may merit consideration. These securities, which are investment-grade corporate bonds with floating coupons, can play a key role in ultra-short duration strategies.

We have seen this play out during as the Fed's current rate-hike regime. On December 13, the Fed raised rates for the third time in 2017—the fifth hike in the past two years. The yield curve has flattened as the yield on the two-year Treasury has increased by 150 bps (see Chart 1), while the 10-year Treasury yield has been range bound. But over the past two years, short-term corporate bonds, CMBS, ABS, floating rate notes, and bank loans have all generated positive returns.

As rates have been moving higher, short-maturity strategies have the benefit of regular cash flows from coupon payments, which can be re-invested at prevailing higher rates. Thus, reinvested or new funds placed in short-maturity securities will be starting at a higher initial yield, creating the potential for higher income in the future.

SUMMING UP

We have long cautioned about the difficulty of accurately predicting moves in interest rates. However, if history is any guide, if we continue to see a move to higher U.S. Treasury yields, we would expect that short-duration bonds, high-yield bonds, and floating-rate loans would have the potential to outperform core bonds. Of course, a reversal in the trajectory of U.S. economic growth, or some other "risk-off" market event, may favor high-quality core bonds.

The best approach to the current environment may be a diversified portfolio, one that includes allocations to high-quality core bonds, short-duration bonds, high-yield bonds, and bank loans. Alternatively, investors could turn to a multi-sector strategy that gives the manager the flexibility to invest across investment-grade, high-yield, and equity-related securities in order to position the portfolio most appropriately for the given economic environment.

IMPORTANT INFORMATION

This ***Market View*** may contain assumptions that are "forward-looking statements," which are based on certain assumptions of future events. Actual events are difficult to predict and may differ from those assumed. There can be no assurance that forward-looking statements will materialize or that actual returns or results will not be materially different from those described here.

A Note about Risk: The value of investments in fixed-income securities will change as interest rates fluctuate and in response to market movements. Generally, when interest rates rise, the prices of debt securities fall, and when interest rates fall, prices generally rise. Bonds may also be subject to other types of risk, such as call, credit, liquidity, interest-rate, and general market risks. High-yield securities, sometimes called junk bonds, carry increased risks of price volatility, illiquidity, and the possibility of default in the timely payment of interest and principal. Moreover, the specific collateral used to secure a loan may decline in value or become illiquid, which would adversely affect the loan's value. Longer-term debt securities are usually more sensitive to interest-rate changes; the longer the maturity of a security, the greater the effect a change in interest rates is likely to have on its price. Lower-rated bonds may be subject to greater risk than higher-rated bonds. No investing strategy can overcome all market volatility or guarantee future results. Statements concerning financial market trends are based on current market conditions, which will fluctuate.

Treasuries are debt securities issued by the U.S. government and secured by its full faith and credit. Income from Treasury securities is exempt from state and local taxes. Although U.S. government securities are guaranteed as to payments of interest and principal, their market prices are not guaranteed and will fluctuate in response to market movements.

A **basis point** is one one-hundredth of a percentage point.

Duration is the change in the value of a fixed-income security that will result from a 1% change in market interest rates. Generally, the larger a portfolio's duration, the greater the interest-rate risk or reward for underlying bond prices.

A **bond yield** is the amount of return an investor will realize on a bond. Though several types of bond yields can be calculated, nominal yield is the most common. This is calculated by dividing the amount of interest paid by the face value.

In the United States, **federal funds** (often referred to as fed funds) are overnight borrowings between banks and other entities to maintain their bank reserves at the U.S. Federal Reserve. Banks keep reserves at Federal Reserve Banks to meet their reserve requirements and to clear financial transactions.

The **London interbank offered rate (LIBOR)** is an interest rate at which banks can borrow funds, in marketable size, from other banks in the London interbank market. The LIBOR is fixed on a daily basis by the British Bankers' Association. The LIBOR is derived from a filtered average of the world's most creditworthy banks' interbank deposit rates for larger loans with maturities between overnight and one full year.

The **Bloomberg Barclays 1-3.5 Year CMBS Index** is a maturity-specific subset of the Bloomberg Barclays U.S. CMBS Investment Grade Index, which measures the market of conduit and fusion CMBS deals with a minimum current deal size of $300 million.

The **Bloomberg Barclays U.S. Aggregate Bond Index** represents securities that are SEC-registered, taxable, and dollar denominated. The Index covers the U.S. investment-grade fixed-rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. Total return comprises price appreciation/depreciation and income as a percentage of the original investment.

The **Bloomberg Barclays U.S. Floating Rate Note Index** is designed to measure the performance of U.S. dollar-denominated, investment grade floating rate notes.

The **ICE BofAML ABS Fixed Rate 0-3 Year Index** is a rate- and maturity-specific subset of the ICE BofAML US Fixed & Floating Rate Asset Backed Securities Index.

The **ICE BofAML Global High Yield Index** tracks the performance of USD, CAD, GBP and EUR denominated below investment grade corporate debt publicly issued in the major domestic or Eurobond markets.

The **ICE BofAML U.S. High Yield Master II Constrained Index** tracks the performance of US dollar denominated below investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of $100 million.

The **ICE BofAML U.S. Corporate BBB-Rated 1-3 Year Index** is an unmanaged index comprised of U.S. dollar denominated investment grade corporate debt securities publicly issued in the U.S. domestic market with between one and three year remaining to final maturity.

IMPORTANT INFORMATION CONTINUED

The **ICE BofAML U.S. Convertible Index** tracks the performance of publicly issued U.S. dollar-denominated convertible securities of U.S. companies. Qualifying securities must have at least $50 million face amount outstanding and at least one month remaining to the final conversion date.

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The **FTSE 2-Year U.S. Treasury Benchmark (On-The-Run) Index** measures the total return for the current two-year on-the-run Treasuries that settle by the end of the calendar month. The index includes bonds with maturities of approximately 2 years. [An on-the-run security is the most recently issued, and hence potentially the most liquid, of a periodically issued security.]

The **FTSE 10-Year Treasury Bond Index** is a broad measure of the performance of medium-term U.S. Treasury securities.

The **Credit Suisse Leveraged Loan Index** is designed to mirror the investable universe of the U.S. dollar-denominated leveraged loan market.

The **S&P 500® Index** is widely regarded as the standard for measuring large cap U.S. stock market performance and includes a representative sample of leading companies in leading industries.

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