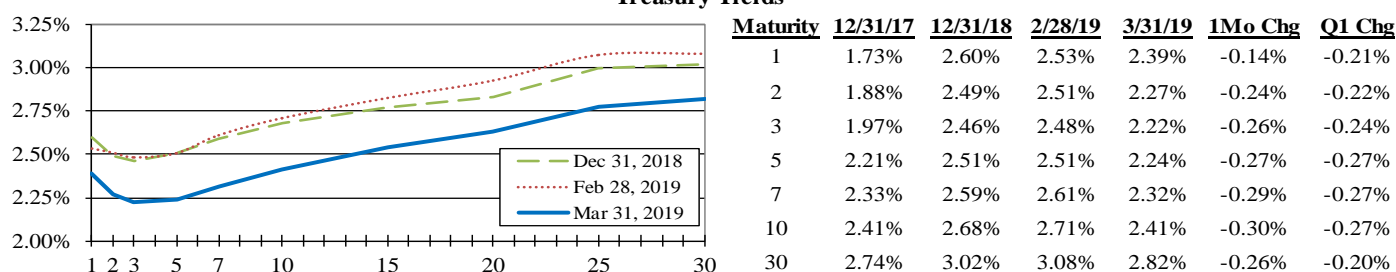


Baird Advisors
Fixed Income Market Commentary
March 2019

Treasury Yields Fall, Curve Flattens, Inverts

The 10yr Treasury yield declined 30 bps in March to end the quarter at 2.41%. Rates fell across the curve and the shape of the curve flattened further, even inverting over certain segments. The yield spread between the 3mo Treasury bill and 10yr Treasury note inverted for five consecutive days (by a modest 6 bps on March 27) – a cautious signal to investors looking for signs of recession. At the March FOMC meeting, the Fed left the fed funds rate band unchanged at 2.25%-2.50% and reduced the expectation for hikes in 2019 from two to zero with possibly one in 2020. The Fed also announced an end to the balance sheet runoff in September, earlier than previously expected. Fed Chair Powell cited threats to economic growth and mild inflation as justification for the formal recognition of the policy shift the Fed began signaling in early January. Market-implied odds of a fed funds rate *cut* by the end of 2019 rose from 10% at the start of the quarter to over 60%. Evidence of slowing growth appeared as Q4 U.S. GDP was revised downward from 2.6% to 2.2% with Q1 expectations now below 2.0%. Overseas, the ECB lowered the outlook for European growth to 1.1% in 2019 from 1.7%. Global rates moved lower as an estimated \$10.2 trillion of global sovereign yields ended the quarter with negative yields. Trade talks continued with China, with hopes to close a deal by the end of April. The U.K. Parliament rejected proposals to leave the EU for the third time, and U.K. leaders are working to craft a compromise that can pass in order to avoid an economically damaging no-deal Brexit on April 12.

Treasury Yields



Spreads Tighten to Start the Year

The Fed's accommodative ("dovish") stance helped spreads tighten further in the quarter as investor demand rebounded from weakness at the end of 2018. Spreads tightened in almost every sector as Investment Grade Corporates tightened 34 bps in the quarter and Non-Agency CMBS tightened 22 bps. Agency Pass-throughs were an exception, with spreads unchanged for the quarter as investors grew more concerned about prepayment risk on falling mortgage rates. While the Fed will end overall balance sheet runoff in September, it confirmed its intention to allow its MBS holdings to completely run off in the long run, only reinvesting in Treasuries.

Option-Adjusted Spreads (in bps)

| | 12/31/17 | 12/31/18 | 2/28/19 | 3/31/19 | 1Mo Chg | Q1 Chg |
|----------------------------|----------|----------|---------|---------|---------|--------|
| U.S. Aggregate Index | 36 | 54 | 45 | 44 | -1 | -10 |
| U.S. Agency (non-mortgage) | 14 | 16 | 14 | 13 | -1 | -3 |
| Mortgage and ABS Sectors | | | | | | |
| U.S. Agency Pass-throughs | 25 | 35 | 35 | 35 | 0 | 0 |
| U.S. Agency CMBS | 35 | 55 | 43 | 45 | 2 | -10 |
| U.S. Non-Agency CMBS | 79 | 107 | 83 | 85 | 2 | -22 |
| Asset-Backed Securities | 36 | 53 | 37 | 39 | 2 | -14 |
| Corporate Sectors | | | | | | |
| U.S. Investment Grade | 93 | 153 | 121 | 119 | -2 | -34 |
| Industrial | 98 | 157 | 127 | 125 | -2 | -32 |
| Utility | 92 | 144 | 118 | 116 | -2 | -28 |
| Financial Institutions | 85 | 147 | 110 | 109 | -1 | -38 |
| Other Govt. Related | 68 | 90 | 77 | 76 | -1 | -14 |
| U.S. High Yield Corporates | 343 | 526 | 379 | 391 | 12 | -135 |
| Emerging Market Debt | 352 | 560 | 458 | 493 | 35 | -67 |

Source: Bloomberg Barclays Indices

Positive Quarter with Corporates Outperforming Treasuries

Returns were positive across the board in the quarter with longer maturities outperforming shorter bonds. Corporates (+5.14%) were the top performing investment-grade sector this quarter, while High Yield Corporates (+7.26%) posted the highest return overall, followed by Emerging Market Debt (+5.89%). High-quality, short-duration sectors such as ABS (+1.48%) posted more modest quarterly returns.

Total Returns of Selected Bloomberg Barclays Indices and Subsectors

| | March | Q1 | Effective Duration (years) |
|--|-------|-------|----------------------------|
| U.S. Aggregate Index | 1.92% | 2.94% | 5.82 |
| U.S. Gov't/Credit Index | 2.12% | 3.26% | 6.58 |
| U.S. Intermediate Gov't/Credit Index | 1.35% | 2.32% | 3.90 |
| U.S. 1-3 Yr. Gov't/Credit Index | 0.66% | 1.21% | 1.91 |
| U.S. Treasury | 1.91% | 2.11% | 6.21 |
| U.S. Agency (Non-Mortgage) | 1.40% | 1.81% | 4.07 |
| U.S. Agency Pass-Throughs | 1.46% | 2.17% | 4.03 |
| CMBS (Commercial Mortgage Backed Securities) | 1.75% | 3.24% | 5.29 |
| ABS (Asset-Backed Securities) | 0.72% | 1.48% | 2.15 |
| U.S. Corporate Investment Grade | 2.51% | 5.14% | 7.42 |
| U.S. High Yield Corporates | 0.94% | 7.26% | 3.42 |
| Emerging Market Debt | 0.23% | 5.89% | 4.65 |
| Municipal Bond Index | 1.58% | 2.90% | 5.82 |
| TIPS (Treasury Inflation Protected Securities) | 1.84% | 3.19% | 5.16 |

Disclosures

This is not a complete analysis of every material fact regarding any company, industry or security. The information has been obtained from sources we consider to be reliable, but we cannot guarantee the accuracy.

Fixed income is generally considered to be a more conservative investment than stocks, but bonds and other fixed income investments still carry a variety of risks such as interest rate risk, credit risk, inflation risk, and liquidity risk. In a rising interest rate environment, the value of fixed-income securities generally decline and conversely, in a falling interest rate environment, the value of fixed-income securities generally increase. High yield securities may be subject to heightened market, interest rate or credit risk and should not be purchased solely because of the stated yield.

Indices are unmanaged, and are not available for direct investment. *Past performance is not a guarantee of future results.*

The Bloomberg Barclays Aggregate Bond Index is an index comprised of approximately 6000 publicly traded bonds including U.S. Government, mortgage-backed, corporate, and Yankee bonds with an average maturity of approximately 10 years.

The Bloomberg Barclays Government/Credit Index is a combination of the Government Index which measures government-bond general and Treasury funds, and the Credit Bond Index, which is a market value-weighted index which tracks the returns of all publicly issued, fixed-rate, nonconvertible, dollar-denominated, SEC registered, investment grade Corporate Debt.

The Bloomberg Barclays Intermediate Government/Credit Index is a combination of the Government Index which measures government-bond general and Treasury funds, and the Credit Bond Index, which is a market value-weighted index which tracks the returns of all publicly issued, fixed-rate, nonconvertible, dollar-denominated, SEC registered, investment grade Corporate Debt with maturities between one and ten years.

The Bloomberg Barclays Government/Credit Intermediate Index (1 – 3 yr.) is a combination of the Government Index which measures government-bond general and Treasury funds, and the Credit Bond Index, which is a market value-weighted index which tracks the returns of all publicly issued, fixed-rate, nonconvertible, dollar-denominated, SEC registered, investment grade Corporate Debt with maturities between zero and three years.

The Bloomberg Barclays U.S. Treasury Index includes public obligations of the U.S. Treasury. Treasury bills are excluded by the maturity constraint of at least one year but are part of a separate Short Treasury Index. In addition, certain special issues, such as state and local government series bonds (SLGs), as well as U.S. Treasury TIPS, are excluded. STRIPS are excluded from the index because their inclusion would result in double-counting. Securities in the Index roll up to the U.S. Aggregate, U.S. Universal, and Global Aggregate Indices. The U.S. Treasury Index was launched on January 1, 1973.

U.S. Agency: This index is the U.S. Agency component of the U.S. Government/Credit index. Publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government (such as USAID securities). The largest issues are Fannie Mae, Freddie Mac, and the Federal Home Loan Bank System (FHLB). The index includes both callable and non-callable agency securities.

U.S. Corporate – Investment Grade: This index is the Corporate component of the U.S. Credit index. It includes publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements. To qualify, bonds must be SEC-registered.

CMBS (Commercial Mortgage-Backed Securities): This index is the CMBS component of the U.S. Aggregate index. The Bloomberg Barclays CMBS ERISA-Eligible Index is the ERISA-eligible component of the Bloomberg Barclays CMBS Index. This index, which includes investment grade securities that are ERISA eligible under the underwriter's exemption, is the only CMBS sector that is included in the U.S. Aggregate Index.

MBS (Mortgage-Backed Securities): This index is the U.S. MBS component of the U.S. Aggregate index. The MBS Index covers the mortgage-backed pass-through securities of Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The MBS Index is formed by grouping the universe of over 600,000 individual fixed rate MBS pools into approximately 3,500 generic aggregates.

ABS (Asset-Backed Securities): This index is the ABS component of the U.S. Aggregate index. The ABS index has three subsectors: credit and charge cards, autos, and utility. The index includes pass-through, bullet, and controlled amortization structures. The ABS Index includes only the senior class of each ABS issue and the ERISA-eligible B and C tranche. The Manufactured Housing sector was removed as of January 1, 2008, and the Home Equity Loan sector was removed as of October 1, 2009.

Corporate High Yield: The Bloomberg Barclays U.S. High Yield Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included.

Emerging Market: Bloomberg uses a fixed list of countries defined as emerging markets countries for index inclusion purposes that is based on World Bank Income group definitions (Low/Middle), IMF country classifications (Non-Advanced Economies), and other advanced economies that may be less accessible or investable for global debt investors.

The Bloomberg Barclays Municipal Bond Index is a broad-based, total-return index. The bonds are all investment-grade, tax-exempt, and fixed-rate securities with long-term maturities (greater than 2 years). They are selected from issues larger than \$50 million.

The Bloomberg Barclays TIPS Index consists of Treasury Inflation Protected Securities (TIPS). TIPS are securities whose principal is tied to the Consumer Price Index. TIPS pay interest semi-annually, based on the fixed rate applied to the adjusted principal.

Ratings are measured on a scale that ranges from AAA or Aaa (highest) to D or C (lowest). Investment grade investments are those rated from highest down to BBB- or Baa3.