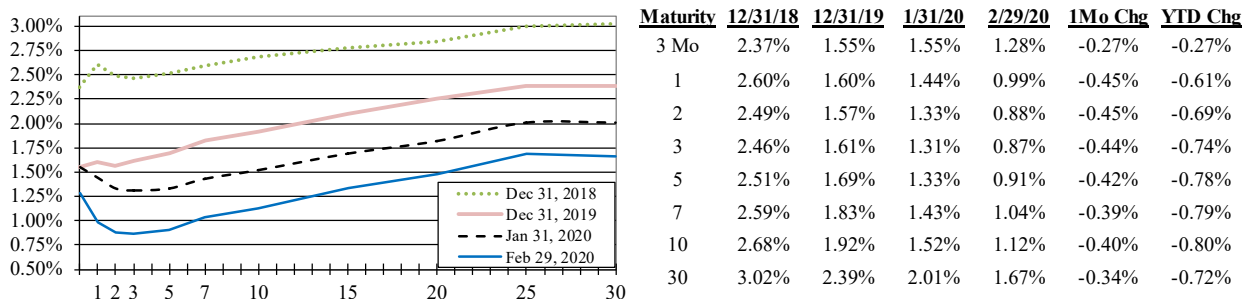


Baird Advisors
Fixed Income Market Commentary
February 2020

Yields Fall, 3mo to 10yr Reinvert as Coronavirus Dampens Global Growth Expectations

The benchmark 10yr Treasury yield declined 40 bps in February – 80 bps for the year – ending the month at 1.12%, a new all-time low. The curve inverted once again in the closely-watched 3mo to 10yr yield maturity segment by -16 bps though the 2yr to 30yr curve was modestly steeper. The coronavirus was the primary driver of rates and market volatility during the month. After originating in China, the virus quickly spread across the globe despite aggressive containment efforts. Concern about the negative economic impact of the virus on the U.S. and global economy led to a spike in market volatility with equity prices falling and credit spreads widening. It was the swiftest “correction” in equities (i.e. a decline of more than 10%) in history. The most visible economic effects of the virus so far are in China, where the Purchasing Managers’ Index fell to a record low of 35.7 in February, indicating that growth in China may have turned negative rather than just slowed. The markets were also processing the surprising early success of Bernie Sanders for the Democratic nomination. While the race remains uncertain, more will be known after Super Tuesday on March 3, when approximately one-third of the *available-delegates* states hold their primaries. At month end Fed Chair Powell acknowledged the Fed was “closely monitoring developments and their implications for the economic outlook.” He went on to state that the Fed will “act as appropriately to support the economy.” Currently the market expects a 25 to 50 bps cut at or before the March 18th Fed meeting and at least two additional rate cuts before year end.

Treasury Yields



Corporate Spreads Widen in Volatile Market

Investment Grade Corporate spreads widened 20 bps in February to 122 bps as it became clear the coronavirus would dampen global growth and detract from corporate earnings. Apple, United Airlines and others withdrew revenue guidance for 2020 due to the impact of the virus. High-Quality securitized sectors widened by smaller magnitudes, with Non-Agency CMBS 9 bps wider to 88 bps and Agency Pass-throughs 6 bps wider to end the month at 54 bps. Agency CMBS Mortgage spreads were unchanged at 50 bps as investor demand remained strong for agency-guaranteed sectors.

Treasuries Outperform as Safe Haven

Treasuries (+2.65%) posted the highest total return in February, as Investors sought safe-haven assets. CMBS (+1.92%) posted the second-highest total returns, reflecting the outperformance of longer maturities in high-quality sectors. High Yield Corporates (-1.41%) and Emerging Market Debt (-1.79%) were the only sectors with negative returns both for the month and year to date.

Option-Adjusted Spreads (in bps)

	12/31/18	12/31/19	1/31/20	2/29/20	1Mo Chg	YTD Chg
U.S. Aggregate Index	54	39	44	50	6	11
U.S. Agency (non-mortgage)	16	10	10	13	3	3
Mortgage and ABS Sectors						
U.S. Agency Pass-throughs	35	39	48	54	6	15
U.S. Agency CMBS	55	53	50	50	0	-3
U.S. Non-Agency CMBS	107	85	79	88	9	3
Asset-Backed Securities	53	44	31	37	6	-7
Corporate Sectors						
U.S. Investment Grade	153	93	102	122	20	29
Industrial	157	99	110	131	21	32
Utility	144	97	102	116	14	19
Financial Institutions	147	80	87	107	20	27
Other Govt. Related	90	72	75	86	11	14
U.S. High Yield Corporates	526	336	390	500	110	164
Emerging Market Debt	560	573	609	691	82	118

Source: Bloomberg Barclays Indices

Total Returns of Selected Barclays Indices and Subsectors

Bloomberg Barclays Index/Sector	February	YTD	Effective Duration (yrs)
U.S. Aggregate Index	1.80%	3.76%	5.88
U.S. Gov't/Credit Index	2.09%	4.52%	7.28
U.S. Intermediate Gov't/Credit Index	1.41%	2.85%	3.97
U.S. 1-3 Yr. Gov't/Credit Index	0.82%	1.37%	1.89
U.S. Treasury	2.65%	5.16%	6.92
U.S. Agency (Non-Mortgage)	1.57%	3.13%	4.02
U.S. Agency Pass-Throughs	1.04%	1.74%	2.17
CMBS (Commercial Mortgage Backed Securities)	1.92%	4.45%	5.34
ABS (Asset-Backed Securities)	0.89%	1.90%	2.17
U.S. Corporate Investment Grade	1.34%	3.71%	8.15
U.S. High Yield Corporates	-1.41%	-1.38%	3.48
Emerging Market Debt	-1.79%	-0.98%	4.69
Municipal Bond Index	1.29%	3.11%	5.03
TIPS (Treasury Inflation Protected Securities)	1.38%	3.51%	4.34

Disclosures

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.

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.