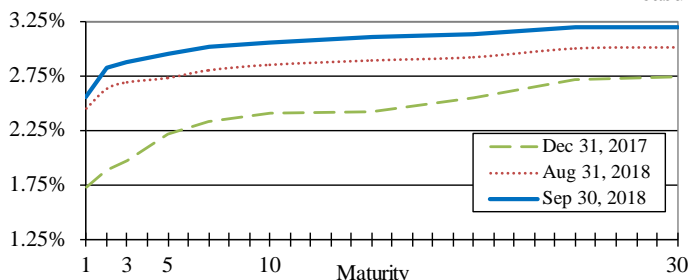


Baird Advisors
Fixed Income Market Commentary
September 2018

Higher Rates, Flatter Curve in Q3

Interest rates rose by more than 20 bps in September and by as much as 30 bps for the quarter as strong economic growth continued in the U.S. despite significant uncertainty surrounding trade, including newly-enacted tariffs. The Fed increased the fed funds target range by 25 bps to 2.00-2.25% at its September meeting and the Treasury curve flattened further during the quarter, fueling concerns that an inverted curve and slower growth may lie ahead. While many focus on the 2yr-10yr Treasury yield spread (currently just +23 bps), the Fed's preferred metric, the 3mo-10yr Treasury yield spread, ended September at +84 bps, still well away from negative territory. Signs of economic strength were evident in tight labor markets, where initial weekly jobless claims fell to 201k - the lowest level in 49 years. The ISM Manufacturing Purchasing Manager's Index (61.3) reached a new cycle high, and a strong reading on the Conference Board's Consumer Confidence Index (138.4) reflected greater confidence with abundant job openings and rising incomes. Average hourly earnings rose +0.4% MoM in August and +2.9% YoY, the highest reading since 2009. However, broad measures of inflation such as the Core Personal Consumption Expenditure Index remained well-contained at the Fed's +2.0% target level.

Treasury Yields



Maturity	12/31/17	6/30/18	8/31/18	9/30/18	1Mo Chg	3Mo Chg	YTD Chg
1	1.73%	2.31%	2.45%	2.56%	0.11%	0.25%	0.83%
2	1.88%	2.52%	2.63%	2.82%	0.19%	0.30%	0.94%
3	1.97%	2.62%	2.69%	2.88%	0.19%	0.26%	0.91%
5	2.21%	2.73%	2.73%	2.95%	0.22%	0.22%	0.74%
7	2.33%	2.81%	2.80%	3.02%	0.22%	0.21%	0.69%
10	2.41%	2.85%	2.85%	3.06%	0.21%	0.21%	0.65%
30	2.74%	2.98%	3.01%	3.20%	0.19%	0.22%	0.46%

Spreads Tighten in Month, Non-Agency CMBS Tighter YTD

Strong demand for investment grade corporate bonds outweighed heavy new issue supply, and spreads tightened 8 bps in September to end the quarter 17 bps tighter at 106 bps. Nevertheless, corporates are still 13bps wider YTD after supply/demand imbalances (e.g. sharp reduction in foreign demand, heightened M&A-related issuance) contributed to spread widening in the first half of the year. In contrast, Non-Agency CMBS have benefitted from more favorable supply/demand technicals, tightening 13bps in the quarter to 73 bps, making it one of only two investment-grade sectors to tighten YTD.

Option-Adjusted Spreads (in bps)

	12/31/17	6/30/18	8/31/18	9/30/18	1Mo Chg	3Mo Chg	YTD Chg
U.S. Aggregate Index	36	44	42	39	-3	-5	3
U.S. Agency (non-mortgage)	14	14	13	12	-1	-2	-2
Mortgage and ABS Sectors							
U.S. Agency Pass-throughs	25	28	29	28	-1	0	3
U.S. Agency CMBS	35	45	40	39	-1	-6	4
U.S. Non-Agency CMBS	79	86	80	73	-7	-13	-6
Asset-Backed Securities	36	47	42	38	-4	-9	2
Corporate Sectors							
U.S. Investment Grade	93	123	114	106	-8	-17	13
Industrial	98	126	117	108	-9	-18	10
Utility	92	118	112	106	-6	-12	14
Financial Institutions	85	118	108	102	-6	-16	17
Other Govt. Related	68	79	76	69	-7	-10	1
U.S. High Yield Corporates	343	363	338	316	-22	-47	-27
Emerging Market Debt	352	495	551	485	-66	-10	133

Source: Bloomberg Barclays Indices

Spread Sectors Outperform, Treasuries Post Negative Quarter

While higher Treasury rates translated to negative returns across investment-grade bonds in September, most sectors managed to enter positive territory for the quarter. TIPS (-0.82%) and U.S. Treasuries (-0.59%) were the worst performing sectors for the past three months, while Corporates (+0.97%) outperformed on solid demand and High Yield (+2.40%) was the top performing sector overall. Turkey's central bank hiked rates to defend the falling Lira and EM contagion fears abated in September, making EM the top performing sector in the month (+3.09%, after -3.69% in August). In spite of this, EM debt remains the worst performing sector YTD (-3.75%).

Total Returns of Selected Bloomberg Barclays Indices and Subsectors

Bloomberg Barclays Index/Sector	September	3 Mo	YTD 2018	Effective Duration (yrs)
U.S. Aggregate Index	-0.64%	0.02%	-1.60%	6.03
U.S. Gov't/Credit Index	-0.67%	0.06%	-1.85%	6.38
U.S. Intermediate Gov't/Credit Index	-0.40%	0.21%	-0.76%	3.90
U.S. 1-3 Yr. Gov't/Credit Index	-0.07%	0.33%	0.41%	1.92
U.S. Treasury	-0.93%	-0.59%	-1.67%	5.99
U.S. Agency (non-mortgage)	-0.43%	-0.01%	-0.54%	3.92
U.S. Agency Pass-throughs	-0.61%	-0.12%	-1.07%	5.28
CMBS (Commercial Mortgage Backed Securities)	-0.49%	0.46%	-0.93%	5.28
ABS (Asset-Backed Securities)	-0.04%	0.49%	0.52%	2.16
U.S. Corporate Investment Grade	-0.36%	0.97%	-2.33%	7.24
U.S. High Yield Corporates	0.56%	2.40%	2.57%	3.76
Emerging Market Debt	3.09%	1.79%	-3.75%	4.59
Municipal Bond Index	-0.65%	-0.15%	-0.40%	6.16
TIPS (Treasury Inflation Protected Securities)	-1.05%	-0.82%	-0.84%	5.44

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.