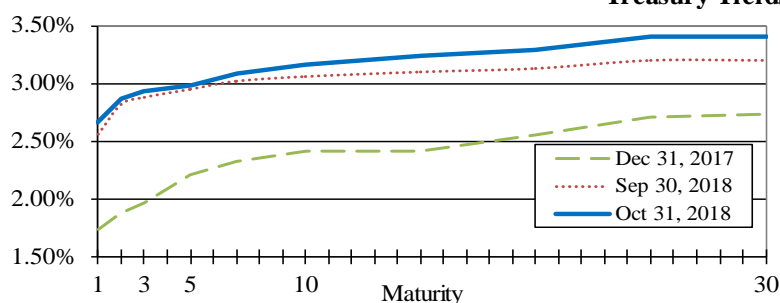


**Baird Advisors**  
**Fixed Income Market Commentary**  
**October 2018**

### Higher Rates and Greater Volatility

Interest rates rose and market volatility spiked in October due to several important developments, not the least of which was Fed Chair Jay Powell's comment that monetary policy was still a "long way from neutral," implying a commitment to further rate hikes. Supporting his view was a solid third quarter GDP report with annualized growth of 3.5%, although concerns over "peak growth" are surfacing. Although still robust, growth in Q3 eased from the 4.2% pace in Q2 and expectations over fading fiscal support as we enter 2019 are playing a role as well. Trade and tariff concerns also contributed to the volatility as it now appears the tensions with China may persist for longer than many expected. The result of the many cross-currents was a benchmark 10-year Treasury rate which reached its highest closing level of the year on October 5th, at 3.23%, before easing back to 3.16% at month end. Beyond the rate hike concern, the Fed's balance sheet reduction plan also continues to impact market activity. Last month the Fed reached its maximum "cap," meaning it will very likely no longer be reinvesting MBS pay-downs and will only reinvest Treasury maturities in excess of the \$30B per month cap. Overseas, the European Central Bank also met in October and reiterated the plan to stop their bond buying program at year end. The Fed's balance sheet reduction and the ECB's decision to end QE are evidence that the long era of central bank balance sheet expansion is at its end.

### Treasury Yields



Maturity	12/31/17	9/30/18	10/31/18	1Mo Chg	YTD Chg
1	1.73%	2.56%	2.66%	0.10%	0.93%
2	1.88%	2.82%	2.87%	0.05%	0.99%
3	1.97%	2.88%	2.93%	0.05%	0.96%
5	2.21%	2.95%	2.99%	0.04%	0.78%
7	2.33%	3.02%	3.08%	0.06%	0.75%
10	2.41%	3.06%	3.16%	0.10%	0.75%
30	2.74%	3.20%	3.40%	0.20%	0.66%

### Spreads Widen as Fed Hikes, Equities Fall

The selloff in the equity market and broader risk-off tone coupled with softer market demand helped push corporate bond spreads 12 bps wider in the month to 118 bps. NonAgency CMBS, which has benefitted YTD from more favorable supply/demand technicals, still felt the impact of broad negative market sentiment, moving 12 bps wider in the month, but still only 6 bps wider YTD. U.S. High Yield corporates were negatively impacted by a sharply lower stock market and industry outflows, as spreads widened 55 bps to end the month at 371 bps, resuming their higher correlation to risk assets such as equities (YTD the sector is a more modest 28bps wider).

### Option-Adjusted Spreads (in bps)

	12/31/17	9/30/18	10/31/18	1Mo Chg	YTD Chg
U.S. Aggregate Index	36	39	44	5	8
U.S. Agency (non-mortgage)	14	12	13	1	-1
Mortgage and ABS Sectors					
U.S. Agency Pass-throughs	25	28	34	6	9
U.S. Agency CMBS	35	39	46	7	11
U.S. Non-Agency CMBS	79	73	85	12	6
Asset-Backed Securities	36	38	43	5	7
Corporate Sectors					
U.S. Investment Grade	93	106	118	12	25
Industrial	98	108	122	14	24
Utility	92	106	112	6	20
Financial Institutions	85	102	112	10	27
Other Govt. Related	68	69	79	10	11
U.S. High Yield Corporates	343	316	371	55	28
Emerging Market Debt	352	485	495	10	143

Source: Bloomberg Barclays Indices

### Short Maturities, High Quality Sectors Outperform

For a second month, higher Treasury rates translated to negative returns across investment-grade bonds, especially in longer maturities. Shorter duration, high-quality sectors such as ABS (+0.07%) posted modest positive returns while U.S. High Yield Corporates (-1.60%) fell the most in October.

### Total Returns of Selected Bloomberg Barclays Indices and Subsectors

Bloomberg Barclays Index/Sector	October	YTD 2018	Effective Duration (yrs)
U.S. Aggregate Index	-0.79%	-2.38%	5.99
U.S. Gov't/Credit Index	-0.87%	-2.70%	6.27
U.S. Intermediate Gov't/Credit Index	-0.14%	-0.90%	3.88
U.S. 1-3 Yr. Gov't/Credit Index	0.11%	0.52%	1.91
U.S. Treasury	-0.48%	-2.14%	5.89
U.S. Agency (non-mortgage)	-0.15%	-0.69%	3.98
U.S. Agency Pass-throughs	-0.63%	-1.70%	5.45
CMBS (Commercial Mortgage Backed Securities)	-0.55%	-1.48%	5.27
ABS (Asset-Backed Securities)	0.07%	0.59%	2.18
U.S. Corporate Investment Grade	-1.46%	-3.76%	7.09
U.S. High Yield Corporates	-1.60%	0.93%	3.91
Emerging Market Debt	-1.11%	-4.81%	4.51
Municipal Bond Index	-0.62%	-1.01%	6.46
TIPS (Treasury Inflation Protected Securities)	-1.43%	-2.27%	5.37

## 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.