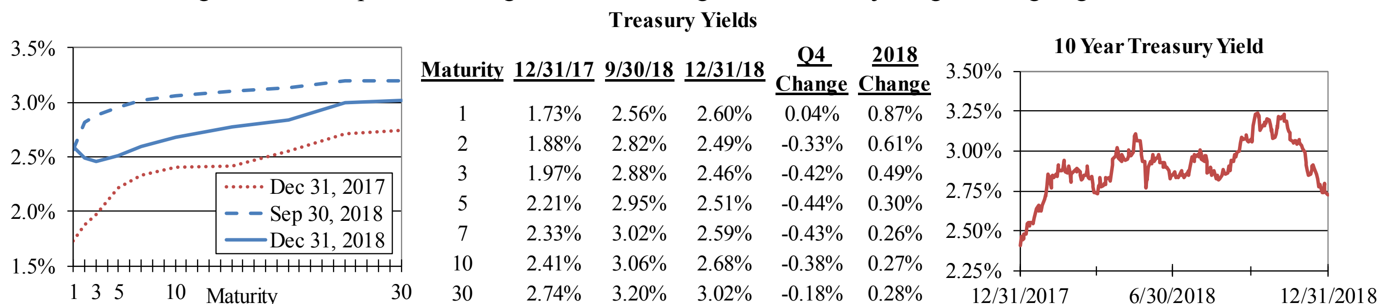
Baird Advisors
Fixed Income Market Commentary
2018 - Year in Review

Strong U.S. Economy Led to Higher Interest Rates; Fed Policy and Politics Created Higher Volatility

Treasury yields rose in 2018 and the yield curve flattened, as stronger economic growth allowed the Fed to continue normalizing monetary policy. The pace of U.S. economic growth rose from 2.2% in 2017 to an estimated 3.0% level for all of 2018, as tax cuts and higher fiscal spending began to impact economic data. The U.S. job market also improved as the Nov. unemployment rate fell to 3.7% from 4.1% to start the year and jobless claims hit the lowest level in 49 years. Average hourly earnings rose +3.1%, a welcomed modest increase from +2.7% in December 2017. The market entered 2018 anticipating 3 fed funds rate hikes of 25 bps each, but the strength of the U.S. economy allowed the Fed to hike by 25 bps a fourth time in December to the 2.25% - 2.50% target range, generally considered the bottom end of their estimated "neutral" range of 2.5%-3.0%. The last hike was not without controversy, however, given recent signs of slowing growth in the U.S. and continued weak growth abroad. Furthermore, broad inflation data remained well contained (Nov. core PCE +1.9% YoY) and many cyclically sensitive commodity prices have been falling, led by a sharp decline in oil. In tandem with rate normalization, the Fed continued its balance sheet normalization, allowing $213B of Treasuries and $128B of Agency MBS issues to roll off over the course of the year. Overseas, the European Central Bank slowed asset purchases in October and ended balance sheet expansion completely in December, removing an additional source of liquidity in the market and undoubtedly contributing to higher financial market volatility. Treasury yields moved higher in two distinct phases in 2018, first in Jan/Feb and then again in Sept/Oct when the 10-year yield peaked at 3.23%, before falling sharply in the last eight weeks of the year as equity markets fell into negative territory for the year and credit spreads widened significantly. A continued hostile geopolitical environment also added to higher financial market volatility in 2018. Throughout the year, tensions flared between President Trump and trading partners, particularly China. Rather than fuel inflation concerns, the tariff and trade uncertainty were seen as a potential drag on global growth at a time when Europe and China were already slowing. Europe spent the year caught in a series of challenges, including the unresolved exit of Britain from the EU, the budget and spending battle between Italy and the European Commission, and the "yellow vest" protests in France. In the U.S., Democrats regained control of the House in November, creating a division of power in Congress, and reducing the odds of major legislation going forward.

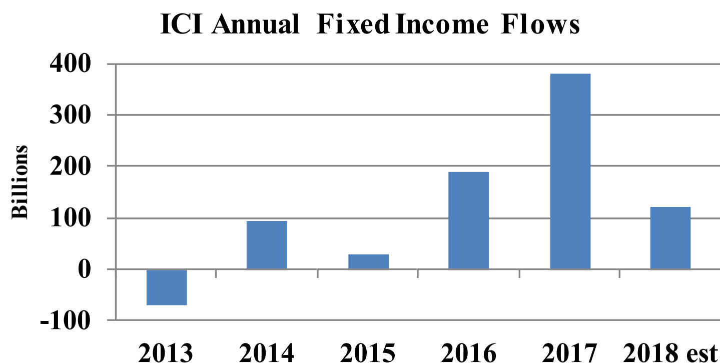


Treasury Yields

Maturity	12/31/17	9/30/18	12/31/18	Q4 Change	2018 Change
1	1.73%	2.56%	2.60%	0.04%	0.87%
2	1.88%	2.82%	2.49%	-0.33%	0.61%
3	1.97%	2.88%	2.46%	-0.42%	0.49%
5	2.21%	2.95%	2.51%	-0.44%	0.30%
7	2.33%	3.02%	2.59%	-0.43%	0.26%
10	2.41%	3.06%	2.68%	-0.38%	0.27%
30	2.74%	3.20%	3.02%	-0.18%	0.28%

Flows Turned Negative in Q4, 2018 Ended Well Below 2017 Record Inflows

Flows into fixed income funds and ETFs ended 2018 at about $120B, down nearly 70% from a record-setting 2017 (see chart below left). January started with over $45B of inflows, but the pace of inflows declined sharply from there and turned negative in the last three months of the year as investors pulled $71B from taxable fixed income. The ICI data set doesn't fully capture demand from all market participants - such as insurance companies, pensions, and foreign investors. However, data from the Fed showed that foreign net buying of investment grade corporate bonds in the first 9 months of the year was running at roughly a quarter of the prior year's pace as the cost of currency hedging rose to new highs. Net corporate supply for 2018 came in at $339B, down over 40% according to Barclays data.



Option-Adjusted Spreads (in bps)

	12/31/17	9/30/18	12/31/18	Q4 Chg	2018 Chg
U.S. Aggregate Index	36	39	54	15	18
U.S. Agency (non-mortgage)	14	12	16	4	2
Mortgage and ABS Sectors					
U.S. Agency Pass-throughs	25	28	35	7	10
U.S. Agency CMBS	35	39	55	16	20
U.S. Non-Agency CMBS	79	73	107	34	28
Asset-Backed Securities	36	38	53	15	17
Corporate Sectors					
U.S. Investment Grade	93	106	153	47	60
Industrial	98	108	157	49	59
Utility	92	106	144	38	52
Financial Institutions	85	102	147	45	62
Other Govt. Related	68	69	90	21	22
U.S. High Yield Corporates	343	316	526	210	183
Emerging Market Debt	352	485	560	75	208

Source: Bloomberg Barclays Indices

Declining Investor Demand and Recession Worries Pushed Spreads Wider in 2018

Softening investor demand for fixed income and late-cycle recession worries drove yield spreads wider in 2018, accelerating in Q4 as fund flows turned negative. U.S. Investment Grade Corporates ended the year 60 bps wider at +153 bps, with 47 bps of that widening coming in the last quarter of the year. Lower-rated credits widened more than higher-rated, as BBB-rated corporates widened 73 bps to +197 bps, while A-rated bonds widened 46 bps to end the year at +119 bps. High-quality securitized sectors such as Asset-Backed Securities held in much better, widening only 17 bps and ending at +53 bps. Outflows in Q4 hit High Yield Corporates especially hard as spreads widened 210 bps in the quarter, ending the year at +526 bps.

High-Quality ABS and Municipals Outperformed in 2018

ABS (+1.77%) and Municipals (+1.28%) were two of the higher-returning investment-grade sectors in 2018. Both benefitted from higher quality outperforming lower quality, and the shorter-duration of ABS kept prices relatively stable as rates rose. Munis benefitted from light supply, solid demand from individual investors, and rising tax revenues. U.S. Investment Grade Corporate returns (-2.51%) lagged as this longer-duration sector came under supply/demand pressure, and the market grew more concerned about the possibility of a recession in coming years. Emerging Market Debt (-4.39%) suffered in the summer as the value of the Turkish Lira and Argentinian Peso declined sharply against the U.S. Dollar. After outperforming Investment Grade Corporates for the first three quarters of the year, High Yield (-4.53% Q4, -2.08% YTD) was the worst performing sector in Q4, as outflows picked up and WTI oil declined below $50/barrel.

Total Returns of Selected Barclays Indices and Subsectors

Bloomberg Barclays Index/Sector	December	Q4	2018	Effective Duration (yrs)
U.S. Aggregate Index	1.84%	1.64%	0.01%	5.87
U.S. Gov't/Credit Index	1.86%	1.46%	-0.42%	6.38
U.S. Intermediate Gov't/Credit Index	1.34%	1.65%	0.88%	3.87
U.S. 1-3 Yr. Gov't/Credit Index	0.78%	1.18%	1.60%	1.90
U.S. Treasury	2.15%	2.57%	0.86%	6.10
U.S. Agency (non-mortgage)	1.42%	1.90%	1.34%	4.01
U.S. Agency Pass-throughs	1.81%	2.08%	0.99%	4.73
CMBS (Commercial Mortgage Backed Securities)	1.62%	1.72%	0.78%	5.30
ABS (Asset-Backed Securities)	0.79%	1.25%	1.77%	2.15
U.S. Corporate Investment Grade	1.47%	-0.18%	-2.51%	7.10
U.S. High Yield Corporates	-2.14%	-4.53%	-2.08%	3.96
Emerging Market Debt	0.93%	-0.67%	-4.39%	4.49
Municipal Bond Index	1.20%	1.69%	1.28%	6.19
TIPS (Treasury Inflation Protected Securities)	0.55%	-0.42%	-1.26%	5.25

2019 Outlook

As we start the New Year, the outlook for Fed policy and interest rates is more uncertain than it was a year ago. Last year, while it was clear that the Fed was very likely to have both the ability and desire to continue normalizing monetary policy, it is unclear if the same need or desire is now present. As of year-end the market anticipates no fed funds rate move in 2019, and the balance sheet unwind will likely be more data-dependent, despite Fed Chair Powell's comments after the December FOMC meeting that it remains on "autopilot." Moderate slowing, perhaps returning to the 2% pace experienced for most of this cycle, rather than recession, is our base case expectation for the U.S. economy in 2019. A strong U.S. consumer and a well-capitalized banking system should support solid overall U.S. growth. However, diminished fiscal stimulus and the lagged impact of the Fed's 2018 rate hikes should reduce growth from the strong, arguably unsustainable, 3% pace experienced this year. We expect that the economic expansion will become the longest on record in the post-WWII era as a result.

While higher volatility is likely to persist, slower economic growth, moderate inflation, and a risk-aware, data-dependent Fed leads us to expect only modest upward pressure on yields in 2019 with the yield curve likely to remain relatively flat with slight inversions possible along select maturity segments. One factor expected to put upward pressure on market yields is the significant borrowing expected by the Treasury, both to fund the rising budget deficit and to refinance maturing federal debt. The heightened deficit means net Treasury issuance is estimated to be $840B in 2019, up nearly 15% from 2018 and roughly double the 2017 level. In addition, approximately $270B of Treasury maturities are poised to runoff the Fed's balance sheet, adding to net supply for the private market.

From a fundamental perspective, the backdrop for corporate credit remains favorable. In 2018 corporate earnings and cash flow grew markedly and overall leverage remained stable - albeit at higher levels than earlier in the cycle due to issuers targeting BBB ratings. Furthermore, M&A activity led to higher leverage in select sectors such as food & beverage. Earnings growth will likely slow from an extraordinary 2018 as one-time tax cut benefits fade, while investors and rating agencies watch for issuers in recent M&A transactions to use strong cash flows to reduce leverage toward pre-transaction levels. The probability of a near-term recession remains relatively low and we expect corporate earnings growth to remain positive, growing at a moderate pace. We remain cautious on the prospects for Agency Pass-through securities, as the Fed continues its balance sheet reduction. An estimated $200B of MBS will run off the Fed's balance sheet, requiring more MBS purchases by the private market. We anticipate MBS spreads will continue their gradual widening toward pre-QE levels. We are more optimistic on the outlook for other securitized sectors, such as Non-Agency RMBS, CMBS and ABS, which we expect to outperform equivalent-duration Treasuries in 2019.

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.

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