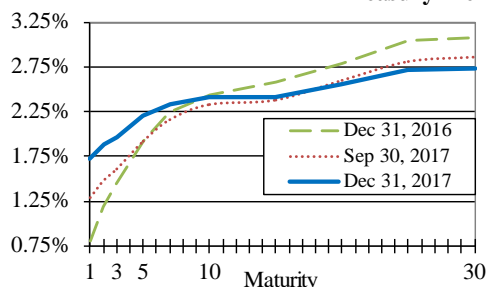


Baird Advisors Fixed Income Market Commentary 2017 - Year in Review

Synchronous Growth, Benign Inflation, Abundant Liquidity Reduce Market Volatility

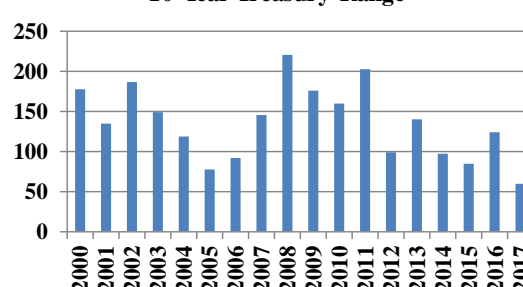
One of the key takeaways from 2017 was the impressively calm nature of bonds in an environment of great uncertainty. In this sense, bonds served their intended purpose, but it required discerning investors to separate the relevant market signals from the noise. While the headlines focused on a myriad of topics, including, (the lack of) progress on healthcare reform, rising geopolitical tensions, and the alarming string of natural disasters, investors remained focused on three key areas. The first was the synchronous improvement in global growth with little upward pressure on inflation. In fact, inflation, as measured by the Core Personal Consumption Expenditure (PCE) in the U.S. fell to +1.5% on a YoY basis from +1.9% at the start of the year. The second key area was the abundant monetary stimulus provided by global central banks. Despite the three rate hikes by the Fed and beginning to gradually allow bonds to roll off its balance sheet, the Bank of Japan (BOJ) and the European Central Bank (ECB) continued to expand their balance sheets which in total further increased global liquidity. In fact, the Fed, ECB, and BOJ combined own nearly 27% of the global tradable bond universe as measured by the Bloomberg Barclays indices. The third important market influence was President Trump’s business-friendly administration, which kept business and consumer confidence elevated all year, in part due to the rollback of regulation which lowers the cost of doing business, and the passage of tax reform at year end. The result was a relatively stable bond market where the 10-year Treasury traded within a 60 basis points (bps) range for the year, the tightest trading band since at least 2000 (see graph below right). The 10-year yield ended the year very near where it began and served as the fulcrum point for a flattening curve throughout the year. Short rates rose, driven by the gradual yet steady normalization of the federal funds rate, while long-term rates fell. Favorable long end supply/demand technicals enhanced the flattening trend as the Fed ownership of nearly \$550 billion (or 33%) of 10+ year Treasury debt minimized the available float while private sector demand for long duration assets remained strong. To illustrate the change, the yield difference between the 2-year and 30-year Treasury narrowed by 87 bps (from +188 bps to +101 bps), a significant change when compared to just 9 bps of flattening that occurred between these two curve segments in 2016.

Treasury Yields



Maturity	12/31/16	9/30/17	12/31/17
1	0.81%	1.29%	1.73%
2	1.19%	1.48%	1.88%
3	1.45%	1.61%	1.97%
5	1.93%	1.92%	2.21%
7	2.25%	2.16%	2.33%
10	2.44%	2.33%	2.41%
30	3.07%	2.86%	2.74%

10-Year Treasury Range



Strong Fundamentals Help Spreads Tighten...

A backdrop of improving growth in the U.S. and abroad helped Investment Grade Corporate spreads tighten 30 bps on the year to +93 bps. Risk was rewarded within this space as BBB-rated companies outperformed higher rated credits. Within corporates, the move tighter was led by the Financial sector which narrowed by 36 bps on improved profitability and strong capital ratios. In the Mortgage and Asset Backed Securities (ABS) Sectors, Agency Pass-throughs was one of the few sectors that widened on the year as the favorable low volatility environment was more than fully offset by the headwinds from higher net supply in the sector. A strong housing market boosted issuance, coupled with the official announcement of the gradual wind-down of the Fed’s balance sheet which added to expected supply. In contrast, ABS and Non-Agency CMBS tightened by 24 bps and 15 bps respectively in 2017, thanks to solid fundamentals for consumers and commercial real estate, while both benefited from much lighter issuance than Agency Pass-throughs.

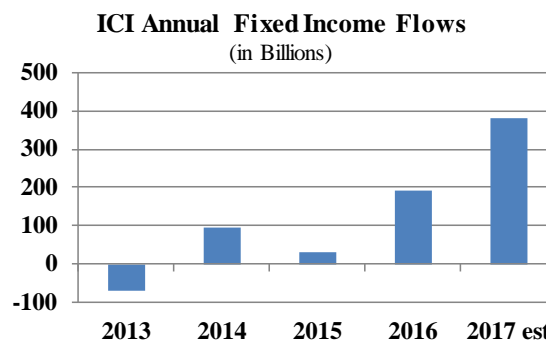
Option-Adjusted Spreads (in bps)

	12/31/16	9/30/17	12/31/17	4Q Chg	YTD Chg
U.S. Aggregate Index	43	38	36	-2	-7
U.S. Agency (non-mortgage)	21	15	14	-1	-7
Mortgage and ABS Sectors					
U.S. Agency Pass-throughs	15	22	25	3	10
U.S. Agency CMBS	47	45	35	-10	-12
U.S. Non-Agency CMBS	93	88	79	-9	-14
Asset-Backed Securities	59	44	36	-8	-23
Corporate Sectors					
U.S. Investment Grade	123	101	93	-8	-30
Industrial	125	105	98	-7	-27
Utility	117	100	92	-8	-25
Financial Institutions	120	93	85	-8	-35
U.S. High Yield	409	347	343	-4	-66

Source: Bloomberg Barclays Indices

...And Record Fund Inflows Absorb Robust Corporate Issuance

Record flows into fixed income mutual funds and ETFs also helped drive spreads tighter on the year. Estimated 2017 flows set a record at ~380B (see chart at right), nearly twice the already strong \$190B inflows that occurred in 2016. These strong flows, (which still do not fully capture demand from all market participants, such as insurance companies, pensions and foreign investors) provided more than sufficient demand to absorb 2017's net corporate supply, which at \$587B according to Barclays data, declined nearly 14% from the prior year.



Corporates, CMBS Outperform in 2017

Corporate credit (+6.42%) and CMBS (+3.35%) were the top performing investment-grade taxable sectors in 2017 thanks to solid fundamentals and the strong sources of demand outlined above. The rise in short-term interest rates detracted from performance on the front of the curve – as seen in the 1-3 Yr. Gov't/Credit Index (+0.84%), which delivered some of the lowest overall 2017 returns. High Yield Corporates (+7.50%) finished the year as the strongest performing sector overall as a down-in-quality “risk-on” bias outperformed, moving in tandem with a 20+% rise in U.S. equity markets. Municipals (+5.45%) offered strong tax-exempt returns for the year driven by strong demand. This was in spite of a record-setting \$62.5B of issuance in December as municipalities sought to issue bonds before the passage of tax reform took effect in 2018.

Total Returns of Selected Barclays Indices and Subsectors

Barclays Index/Sector	December	4 th Quarter	2017
U.S. Aggregate Index	0.46%	0.39%	3.54%
U.S. Gov't/Credit Index	0.52%	0.49%	4.00%
U.S. Intermediate Gov't/Credit Index	0.11%	-0.20%	2.14%
U.S. 1-3 Yr. Gov't/Credit Index	0.03%	-0.21%	0.84%
U.S. Treasury	0.31%	0.05%	2.31%
U.S. Agency	0.12%	-0.02%	2.06%
MBS (Mortgage Backed Securities)	0.33%	0.15%	2.47%
CMBS (Commercial Mortgage Backed Securities)	0.29%	0.35%	3.35%
ABS (Asset Backed Securities)	0.02%	-0.01%	1.55%
U.S. Corporate - Investment Grade	0.91%	1.17%	6.42%
Corporate High Yield	0.30%	0.47%	7.50%
Municipal Bond Index	1.05%	0.75%	5.45%
TIPS (Treasury Inflation Protected Securities)	0.92%	1.26%	3.01%

Outlook

In 2018, we expect modest upward pressure on rates and a continuation of the flattening trend for the yield curve. The recently passed “Tax Cuts and Jobs Act,” was a significant legislative milestone that should provide some additional strength to an already solidly expanding U.S. economy. Consumers will have more to spend and businesses more to invest in labor and equipment or return to shareholders. We expect economic growth in 2018 that will be closer to 3% than the 2% average of recent years. A slight firming in wages and inflation may also occur, but the countervailing forces of aging demographics and the substitution of labor by technology remain powerful disinflationary influences that should help offset any significant upward pressure. In addition, the improved U.S. economic outlook is matched by expectations of solid and broad-based global growth. Solid U.S. and global economies should allow the Fed to continue normalizing monetary policy throughout the year and the ECB to begin its long, gradual process of normalization. The ECB recently cut in half its monthly asset purchases, from €60B to €30B, with plans to revisit purchase levels in September. In the U.S., although the Fed is undergoing a leadership change, with the new Chair nominee, Jay Powell, expected to take over for Janet Yellen at the same time that other members of the FOMC are also in transition, we still expect three federal funds rate increases once again this year, and that the planned reduction in its balance sheet will continue.

From a sector perspective, we continue to favor Investment Grade corporates and like select areas of the mortgage and asset-backed sectors. Fundamentals for Investment Grade corporates are favorable, as solid balance sheets and strong earnings trends should continue in 2018. Corporates should also benefit from attractive supply/demand technicals as net issuance declines modestly while demand for yield remains strong. That said, credit spreads among Investment Grade corporates are largely back to pre-crisis levels, suggesting further gains from additional spread tightening will become more difficult. We are less sanguine about High Yield corporates, where we find value only selectively as spreads are generally insufficient for the risk. We continue to see risk of spread widening in agency Pass-throughs as the Fed allows \$168B of its Agency MBS paydowns to go uninvested, requiring bonds to clear at private market levels. Instead we favor Agency CMBS which benefits from more cashflow timing certainty and more stable supply/demand technicals. We see good value in Non-Agency RMBS, where new issuance is limited and housing fundamentals are solid. We continue to like senior Non-Agency CMBS structures with superior credit enhancement as well as select short duration asset-backed sectors (e.g. credit cards, prime auto). For further discussion on our 2018 outlook for bond markets, please review our [“Lower & Longer” Has Legs](#) white paper.

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.

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.