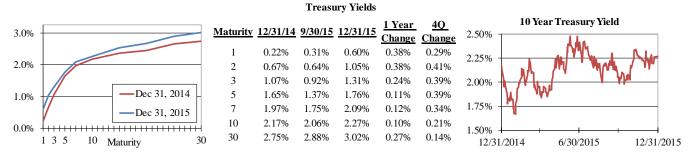


# Baird Advisors Fixed Income Market Comments 2015 - Year in Review

## Fed Ends Zero-Rate Policy, Yields Rise Modestly, Volatility Increases

The U.S. economy grew at a moderate pace in 2015 (3Q GDP +2.1% YoY) which was enough to drive the unemployment rate from 5.7% to 5.0%, spurring the Fed to raise rates by 25 bps after 7 years of maintaining a zero interest rate policy. In anticipation of additional Fed action in 2016, the 1-year and 2-year Treasury yields rose 38 bps, while intermediate and long yields rose by lesser amounts (see table below) as U.S. inflation remained subdued (Nov. CPI +0.5% YoY, Nov. average hourly earnings +2.3% YoY). The year was marked by significant volatility, with the 10-year Treasury trading in an 81 bp range from 1.67% to 2.48% (see graph below right). In addition to anticipated Fed actions, market volatility throughout the year was also heightened by global macro uncertainty, escalating geopolitical tension, and further divergence in global central bank policies: the Bank of Japan carried on QE purchases through 2015, the ECB began a quantitative easing (QE) program in March, Greece reached a last-minute bailout agreement in July, Chinese equity markets fell by more than 40% this summer, and the People's Bank of China (PBOC) unexpectedly devalued its currency against the dollar in August.

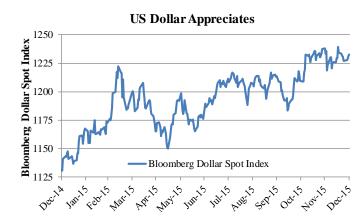


### Weak Global Demand: Oil & Commodities Drop Further in 2015, US Dollar Appreciates

The PBOC's unexpected currency devaluation raised worries that a slowdown in the world's second largest economy was worse than previously thought, putting further downward pressure on global energy and commodity prices. With China being the largest consumer of many commodities (see table below left), a slowdown in the Chinese economy helped drive copper prices nearly 25 % lower, while iron ore and oil each fell more than 30% in 2015. The easing of monetary policy at the PBOC and ECB in contrast to tightening in the U.S. increased global capital flows into U.S. markets, contributing to a 9% appreciation of the U.S. Dollar against a basket of global currencies (see graph below right).

Global Commodity Consumption									
2015 Demand Estimates									
		Developed Emergi							
	China	Countries	Countries						
Thermal Coal	77%	13%	10%						
Oil	12%	49%	39%						
Copper	45%	34%	21%						
Iron Ore	73%	22%	5%						
Aluminum	50%	36%	14%						

Source: Macquarie Research, International Energy Agency



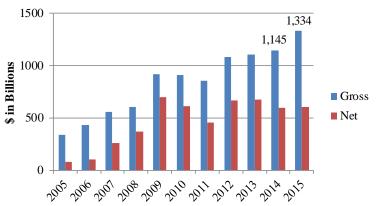
## Spreads Widen on Heavy Issuance and Fundamental Credit Concerns in Energy and Commodity Sectors

Global growth concerns and falling energy and commodity prices pushed yield spreads wider across all major sectors this year. Investment grade credit ended the year 34 bps wider at 165 bps as 2015 supply exceeded \$1.3 trillion (surpassing 2014's \$1.1 trillion record - see chart, next page right). Within investment grade credit, industrials (+43 bps) widened the most, as profitability and operating cash flow at energy and basic materials companies fell with lower oil and commodity prices. Financials were the best performing corporate sub-sector (widening a more modest 17 bps to 134 bps) as fundamentals remained strong and regulatory-related issuance needs were less than expected. Spread widening was more modest in high quality securitized sectors such as agency mortgage pass-throughs and asset-backed securities as supply was benign and the Fed continued to reinvest principal and interest payments from QE holdings into agency MBS. U.S. high yield widened 177 bps to 660 bps as company fundamentals weakened and the sector saw large industry outflows (e.g. Third Avenue liquidation).

### **Option-Adjusted Spreads (in bps)**

	12/31/14	0/30/15	11/30/15	12/31/15	Dec Chg	4Q Chg	2015 Chg
	12/31/14	9130113	11/30/13	12/31/13	Cing	Clig	Cilg
U.S. Aggregate Index	48	59	53	56	3	-3	8
U.S. Agency (non-mortgage)	16	17	14	21	7	4	5
Mortgage and ABS Sectors							
U.S. Agency Pass-throughs	27	31	23	24	1	-7	-3
Asset-Backed Securities	58	69	65	72	7	3	14
CMBS	98	108	102	121	19	13	23
Corporate Sectors							
U.S. Investment Grade	131	169	155	165	10	-4	34
Industrial	140	184	170	183	13	-1	43
Utility	119	152	145	150	5	-2	31
Financial Institutions	117	145	129	134	5	-11	17
U.S. High Yield	483	630	602	660	58	30	177
Source: Barclays							

## Credit Issuance: Gross and Net Supply



## Taxable Sectors Negative for the Quarter, Mixed for the Year, Municipals Outperform

Rising yields and wider spreads translated to negative total returns across all major taxable sectors for the quarter, although many stayed positive for the year. Shorter duration sectors/indices (1-3 Yr. Gov't/Credit Index -0.36% in 4Q) and agency MBS (-0.10%) managed to post less negative quarterly returns. High yield was the hardest hit sector by a wide margin in the quarter (-2.07%) and year (-4.47%) as both the energy and metals & mining components of the index dropped nearly 25% in 2015. In contrast, tax-exempt municipals outperformed taxable sectors significantly for the quarter (+1.50%) and year (+3.30%) as limited supply was met with robust demand. Moreover, in spite of negative headlines (e.g. PR, IL, Chicago) general credit conditions for most municipalities actually improved in 2015, driving additional outperformance.

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

Barclays Index/Sector	<u>December</u>	4th Quarter	<u>2015</u>
U.S. Aggregate Index	-0.32%	-0.57%	0.55%
U.S. Gov't/Credit Index	-0.43%	-0.74%	0.15%
U.S. Intermediate Gov't/Credit Index	-0.33%	-0.69%	1.07%
U.S. 1-3 Yr. Gov't/Credit Index	-0.13%	-0.36%	0.65%
U.S. Treasury	-0.16%	-0.94%	0.84%
U.S. Agency	-0.27%	-0.64%	1.01%
MBS (Mortgage Backed Securities)	-0.03%	-0.10%	1.51%
CMBS (Commercial Mortgage Backed Securities)	-0.89%	-1.24%	0.97%
ABS (Asset Backed Securities)	-0.19%	-0.57%	1.25%
U.S. Corporate - Investment Grade	-0.78%	-0.58%	-0.68%
Corporate High Yield	-2.52%	-2.07%	-4.47%
Municipal Bond Index	0.70%	1.50%	3.30%
TIPS (Treasury Inflation Protected Securities)	-0.79%	-0.64%	-1.44%

#### Outlook

We expect the modest pace of U.S. economic growth to continue and inflation to remain contained in 2016, although uncertainties around global central bank policies and fragile global growth create a wide distribution of possibilities. Recent inflation data (November average hourly earnings +2.3% YoY) could portend a modest pickup in wage inflation, although we expect that low oil and commodity prices will help limit overall inflation for some time. Additional federal funds rate hikes in 2016 will likely put upward pressure on rates with a curve flattening bias; however, the magnitude will be limited as we expect the Fed will move much more slowly than in previous cycles. Moreover, low interest rates abroad (due in part to accommodative foreign central bank policies) will continue to hold down U.S. Treasury yields and limit the magnitude of any move higher as foreign capital continues to flow into U.S. markets. We see good potential for tighter spreads and outperformance from several non-government sectors where spreads widened in 2015. In particular we see good potential for investment grade corporates to outperform. We also see select relative value in senior CMBS structures with superior credit enhancement as well as many shortduration asset-backed sectors (e.g. cards, autos, equipment). We remain cautious on agency MBS as the Fed will discontinue MBS reinvestment purchases once policy normalization is "well underway" and wider spreads may be required to absorb any material increase in supply. Non-agency RMBS continues to offer attractive relative value as new issuance is very limited and housing fundamentals continue to improve. Even after a second year of wider high yield spreads, we remain cautious of the sector, finding value only selectively. Municipal market valuations are less compelling than they were at the start of last year, given the strong outperformance of the sector in 2015. That said, the diverse nature of the municipal market will likely continue to offer select pockets of value from both taxable and tax-free issuers (see the Baird Municipal Fixed Income Market Comments for more detail on this sector).

#### 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 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 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 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 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 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 Barclays CMBS ERISA-Eligible Index is the ERISA-eligible component of the 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 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 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 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.