Lyons Township Trustees of Schools

William Blair

Low Duration Fixed Income Portfolio

Quarterly Review

December 2013

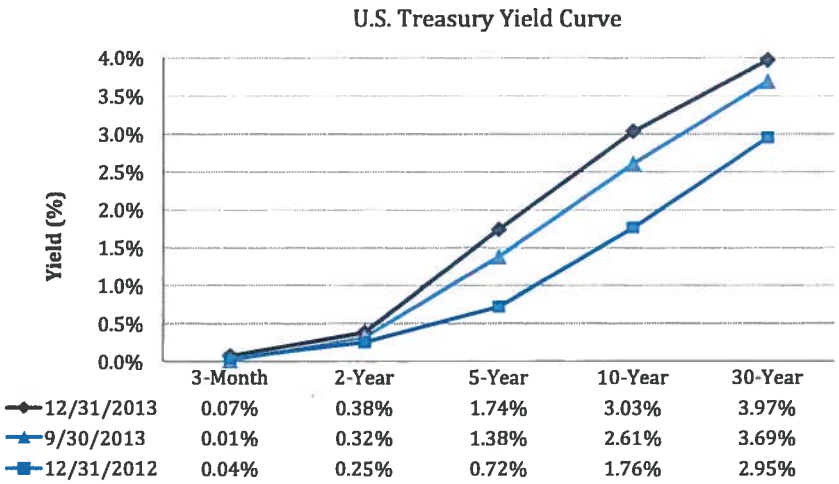
Chris Vincent, CFA, Partner
Paul J. Sularz
Portfolio Managers

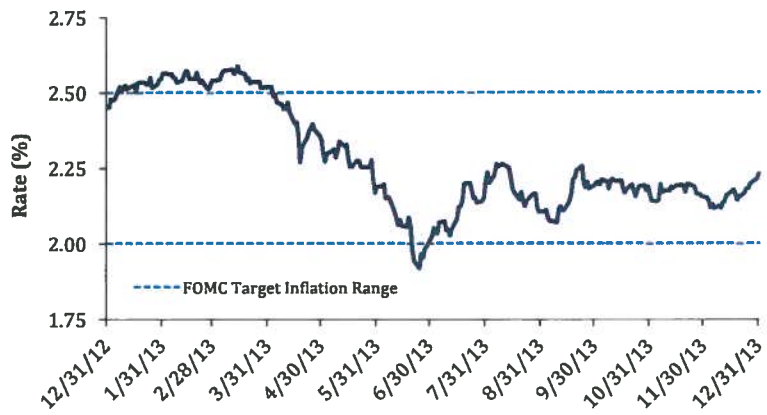
Fixed income instruments declined in 2013 as the market began to price in the impact of the FOMC reducing the scale of its quantitative easing programs. As a result, interest rates rose and interest rate volatility spiked. The 10-year Treasury note yielded 3.03% at month-end.

We believe that the threat of a *sustained, rapid* rise in interest rates is subdued, though longer-term interest rates may tread higher. Interest rate volatility has increased due to uncertainty surrounding the timing and magnitude of the FOMC's exit from its quantitative easing programs. However, the FOMC continues to maintain its zero interest rate policy for the federal funds rate and assert that interests rate remain at low levels until the unemployment rate declines below 6.5% and inflation expectations are well-anchored.

With corporations holding record levels of cash, the corporate bond market remains concerned about shareholder-friendly activities such as leveraged buyouts (LBO's), large share repurchases, and special dividends. We believe idiosyncratic risks are among the top issues for investment-grade corporate bond investors, but we do not believe the market will enter a period of excessive LBO activity.

We believe that spread sectors are poised to lead the market. Corporate risk premiums are at levels near their longer-term averages but not approaching the historically cheap levels experienced in prior years. In addition, fundamentals are strong, as corporations' balance sheets are strong given their historically high level of cash holdings. For these reasons, coupled with the low level of Treasury interest rates, we are bullish on spread products relative to Treasuries.



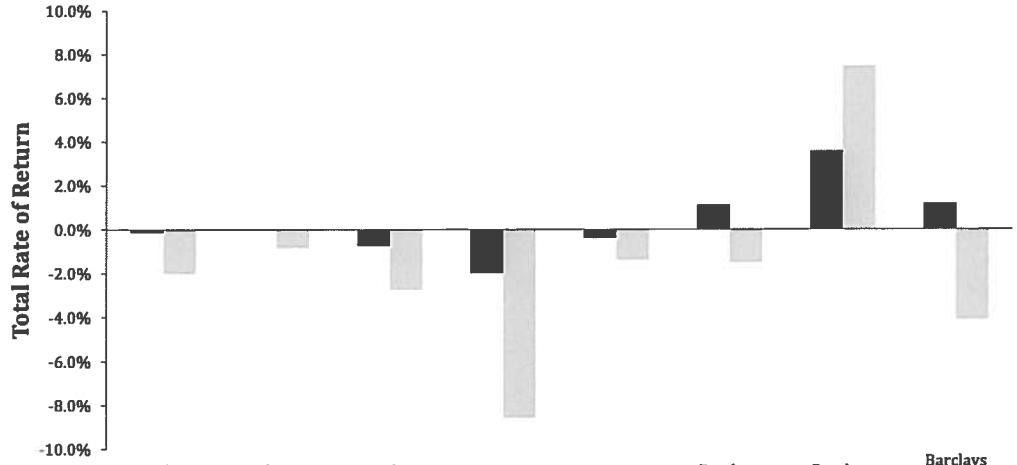


- Long term rates increased both during the fourth quarter and YTD.
- The 10-year Treasury note increased 42 bps QTD, rose 127 bps YTD, and yielded 3.03% at month-end.
- TIPS breakeven rates were little changed during the fourth quarter but declined YTD. The TIPS breakeven rate is the market-implied, forward-looking inflation expectation.
- The FOMC met on December 17 and 18 and kept the Fed Funds rate at a range of 0.00 – 0.25%. The FOMC decided to reduce modestly its pace of asset purchases starting in January 2014. The FOMC will purchase MBS at a pace of $35 billion per month (instead of $40 billion) and longer-term Treasury securities at a rate of $40 billion per month (instead of $45 billion). The next FOMC announcement is on January 29.
- The FOMC continues its large-scale asset purchase program until it has more evidence that economic progress can be sustained. In January 2014, the FOMC will purchase securities at a rate of $75 billion per month, a decline from the $85 billion per month pace at which it purchased securities in late 2013.

Data as of December 31, 2013.

Source: Bloomberg.

Past performance is no guarantee of future results. The performance shown is for illustrative purposes and is not intended to represent the performance of any account or investment strategy managed by William Blair & Company.



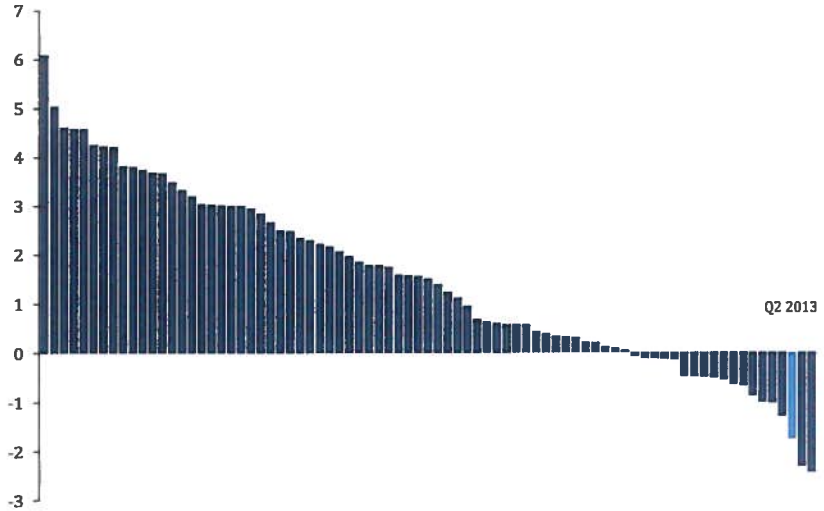
	Barclays Aggregate	Barclays Int Gov / Credit	Barclays Treasury	U.S. TIPS	MBS	Barclays Corporate	Barclays High Yield	Barclays Emerging Markets
Quarter-to-Date	-0.14%	-0.02%	-0.75%	-2.00%	-0.42%	1.11%	3.58%	1.17%
Year-to-Date	-2.02%	-0.86%	-2.75%	-8.61%	-1.41%	-1.53%	7.44%	-4.12%

- The Barclays Aggregate Index returned -0.14% QTD and -2.02% YTD.
- Investment-grade corporate bonds outperformed the broad market QTD and YTD. Risk spreads declined during the fourth quarter.
- High Yield corporate bonds generated gains and outperformed investment-grade bonds QTD and YTD.
- Emerging Markets bonds outperformed the broad market QTD but have trailed the market YTD.
- The MBS Index trailed the broad market QTD but outperformed the market YTD. Lower-coupon segments that the FOMC targeted in its QE programs have trailed their higher-coupon counterparts.
- TIPS have trailed nominal Treasuries QTD and YTD. The market's implied inflation expectations decreased in 2013 as the market began pricing in a reduction in the FOMC's quantitative easing programs.

Source: Barclays Family of Indices.

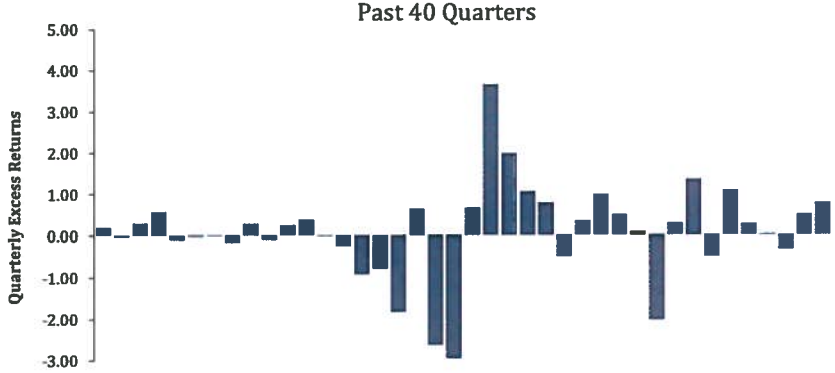
Past performance is no guarantee of future results. A direct investment in an unmanaged index is not possible. The performance shown is for illustrative purposes and is not intended to represent the performance of any account or investment strategy managed by William Blair & Company.

Barclays Aggregate Index Quarterly Total Returns Since 1994

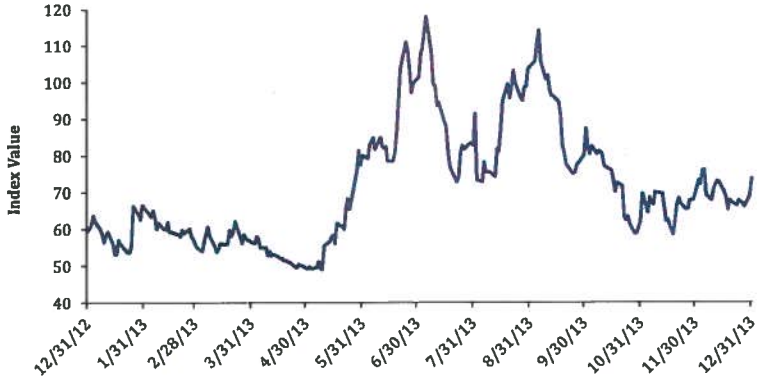


- The Barclays Aggregate Index gained during the fourth quarter. YTD performance was impacted by Q2 performance, which was the Index's 3rd worst quarter since 1994.
- The MOVE Index declined to more normal levels as much of the uncertainty about the FOMC's easing programs and leadership has been addressed.
- Excess returns measure relative performance versus a duration-neutral basket of U.S. Treasuries.
- The Merrill Lynch Option Volatility Estimate (MOVE) Index is a yield curve weighted index of the implied volatility on various Treasury interest rates. It is a measure of interest rate volatility that is akin in concept to the CBOE SPX Volatility Index (VIX).

Barclays Capital Aggregate Index
Past 40 Quarters

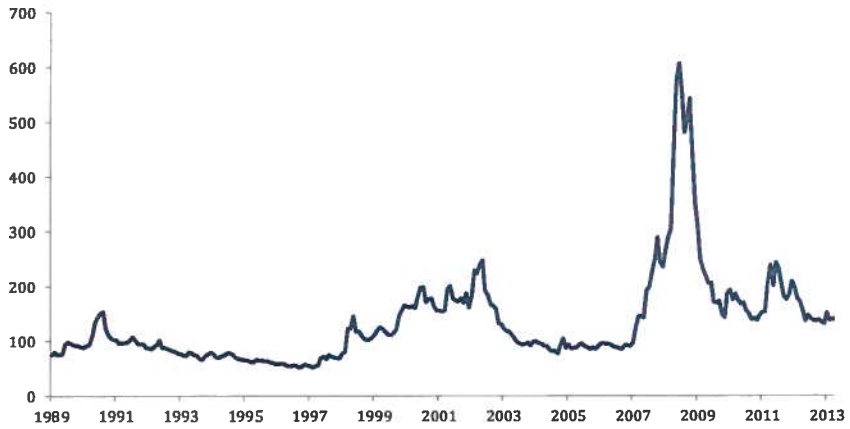


MOVE Index



Source: Barclays Family of Indices, Bloomberg, Bank of America/Merrill Lynch.
Excess Return is a security's return minus the return from a no-risk security of the same duration. The performance shown is for illustrative purposes and is not intended to represent the performance of any account or investment strategy managed by William Blair & Company.

U.S. Corporate Investment Grade – Treasury OAS



- Corporate bonds have outperformed the broad market in the fourth quarter and YTD. Risk spreads declined during the fourth quarter (impact not seen in chart above due to long horizon).
- Corporate bonds have generated positive excess returns YTD. Financials have outperformed other segments of the market. Non-corporate credit trailed the corporate segment by a considerable margin.
- High yield bonds have gained YTD and outperformed investment-grade corporate bonds. Emerging market corporate bonds declined and lagged the broad corporate market YTD.
- Excess returns measure relative performance versus a duration-neutral basket of U.S. Treasuries.

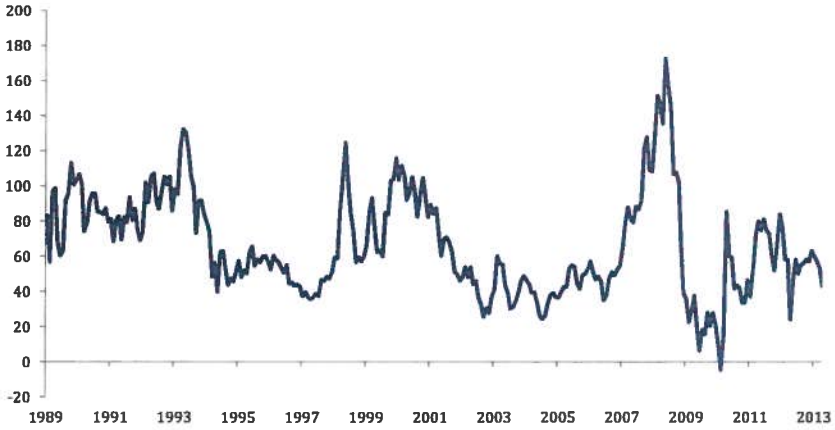
	Total Returns		Excess Returns	
	QTD	YTD	QTD	YTD
Barclays Credit Index	0.92	-2.01	2.08	2.26
1–10 Year Credit	0.68	-0.17	1.33	1.76
1–3 Year Credit	0.48	1.45	0.45	1.17
Industrial	1.04	-2.62	2.37	2.24
Financial	1.36	0.93	2.23	3.93
Utility	0.74	-3.19	2.35	2.95
Non-Corporate	0.20	-3.80	1.22	0.03
AA+	0.14	-2.10	0.96	1.00
A	0.89	-1.92	2.09	2.53
BBB	1.35	-2.06	2.67	2.66
Barclays High Yield	3.58	7.44	4.22	9.23
BB	3.16	5.05	3.97	7.48
B	3.59	7.27	4.16	8.76
CCC	4.27	13.82	4.70	14.96
Barclays EM USD Aggregate: Corporate	1.74	-1.83	2.56	1.04

Data as of December 31, 2013.

Source: Barclays Family of Indices.

Past performance is no guarantee of future results. The performance shown is for illustrative purposes and is not intended to represent the performance of any account or investment strategy managed by William Blair & Company.

U.S. Mortgage Backed Securities – Treasury OAS



- Mortgage-backed securities (MBS) have outperformed the broad market YTD and generated positive excess returns.
- Higher-coupon pools have outperformed lower-coupon pools both QTD and YTD.
- The 30 Year and 15 Year MBS Indexes earned similar total returns QTD, but the 15 Year MBS Index outperformed the 30 Year MBS Index YTD. However, the 30 Year MBS Index offered higher excess returns, on average.
- Excess returns measure relative performance versus a duration-neutral basket of U.S. Treasuries.

	Total Returns		Excess Returns	
	QTD	YTD	QTD	YTD
MBS Fixed Rate Index	-0.48	-1.45	0.56	1.01
Conventional 30 Year	-0.43	-1.29	0.65	1.43
3.0 Coupon	-1.78	-6.43	-0.31	-2.19
3.5 Coupon	-1.40	-3.85	-0.07	-0.33
4.0 Coupon	-0.76	-1.42	0.37	1.40
4.5 Coupon	0.18	0.41	1.13	2.72
5.0 Coupon	0.81	1.83	1.56	3.69
5.5 Coupon	1.36	2.08	1.95	3.48
6.0 Coupon	2.03	2.69	2.60	4.11
6.5 Coupon	0.80	1.39	1.38	2.97
Conventional 15 Year	-0.40	-0.90	0.25	0.43
2.5 Coupon	-0.91	-3.07	-0.03	-1.02
3.0 Coupon	-0.81	-1.21	-0.09	0.23
3.5 Coupon	-0.32	0.56	0.25	1.74
4.0 Coupon	0.30	0.77	0.72	1.65
4.5 Coupon	0.88	0.84	1.08	1.20
5.0 Coupon	0.93	0.55	1.00	0.58
5.5 Coupon	1.37	2.50	1.49	2.66
6.0 Coupon	0.59	2.03	0.74	2.31

Data as of December 31, 2013.

Source: Barclays Family of Indices.

Past performance is no guarantee of future results. The performance shown is for illustrative purposes and is not intended to represent the performance of any account or investment strategy managed by William Blair & Company.

Interest rates rose during the fourth quarter of 2013, but interest rate volatility returned to more normal levels as several uncertainties surrounding the Federal Reserve were addressed during the quarter. Janet Yellen was announced to be the next Chairperson of the Federal Reserve, and the FOMC announced its intentions to reduce their pace of asset purchases by $10 billion per month beginning in 2014.

During the fourth quarter, the Barclays Aggregate Index returned -0.14% as longer-term rates rose but corporate risk spreads narrowed and mitigated the impact of rising rates. Fixed-rate Treasuries were the worst-performing sector of the Index, and TIPS lagged the market. Corporate bonds fared well, as risk spreads narrowed. Financials continued to lead the market and outperform other sectors. High yield corporate bonds continued to generate strong returns. Emerging market-related bonds posted gains during the quarter after struggling during the first 9 months of the year. MBS also performed well, and higher-coupon MBS outperformed lower-coupon alternatives during the quarter.

2013 will be remembered as a remarkable year in the annals of the fixed income market. The Barclays Aggregate Index posted its first calendar year negative total return since 1999 and its worst calendar year return since 1994. The circumstances surrounding this performance were unique; longer-term interest rates rose dramatically due to a confluence of two factors: uncertainty surrounding who would be appointed to succeed Ben Bernanke as Chairperson of the Federal Reserve, and uncertainty over what impact the removal of unconventional monetary policy stimulus would have on long-term interest rates. By the end of the year, some of these uncertainties were resolved; it was announced that Janet Yellen would be nominated to be the next Chairperson of the Federal Reserve, and in December the FOMC announced its plan to "taper" its quantitative easing programs by reducing the pace of its asset purchases by $10 billion per month – to $75 billion of purchases from $85 billion. Interest rate volatility, which surged during the summer months of 2013, returned to more normal levels by the end of the year as these uncertainties were addressed, while interest rates rose throughout the year and ended the year at their highest levels.

Major Markets Returns
Periods Ending 12/31/2013

	Quarter-to-Date	Year-to-Date
Russell 3000 Index	10.10%	33.55%
S&P 500 Index	10.51%	32.39%
Russell 2000 Index	8.72%	38.82%
MSCI EAFE Index	5.71%	22.78%
MSCI EM Index	1.83%	-2.60%
Barclays Aggregate Index	-0.14%	-2.02%

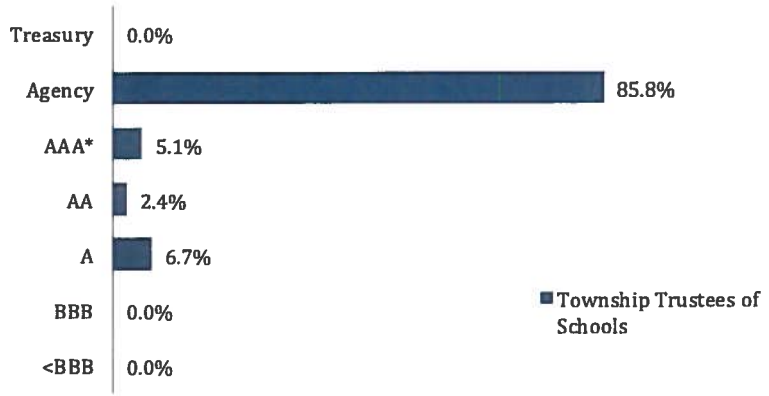
The Barclays Aggregate Index declined 2.02% in 2013 as longer-term interest rates rose. Areas of the market tied to FOMC policy and inflation were particularly hard-hit during 2013. TIPS struggled as inflation expectations declined, as any removal or reduction of monetary policy stimulus was construed to be disinflationary. Segments of the market that the FOMC targeted through its quantitative easing operations also posted outsized declines. Fixed-rate Treasuries and low-coupon mortgage-backed securities were among the worst-performing segments of the investment-grade bond market. Bonds tied to emerging markets issuers also lagged due to economic and political issues within several emerging market countries and global disinflationary pressures.

Several segments of the bond market performed better than the market during 2013. Mortgage-backed securities outperformed the broad market, while several higher-coupon segments of the market generated positive total rates of return despite the rising-rate environment. Corporate bonds also performed better than the market. Corporate risk spreads narrowed, and the sector generated excess returns for the year (relative to comparable-duration Treasury instruments). Investment-grade financials generated a positive total return during the year and outperformed the other major sectors. High yield bonds enjoyed the best performance; the Barclays High Yield Index generated a return of +7.44% during the year, with the lowest-quality.

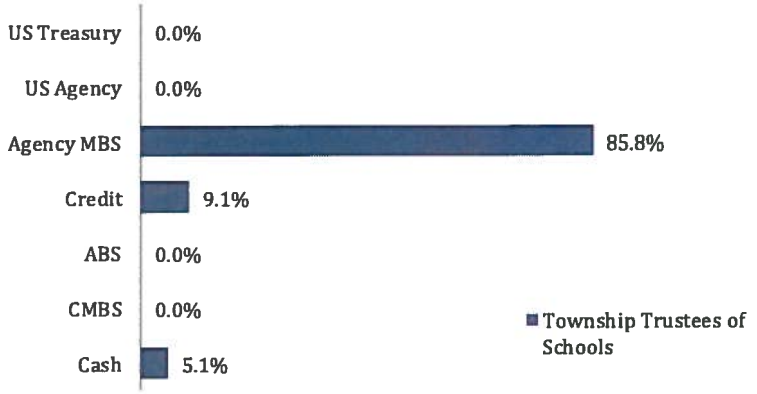
This information has been prepared solely for informational purposes and is not intended to provide or should not be relied upon for accounting, legal, tax or investment advice. The factual statements herein have been taken from sources we believe to be reliable, but such statements are made without any representation as to accuracy or completeness. Opinions expressed are current opinions as of the date appearing in this material only. These materials are subject to change, completion, or amendment from time to time without notice and William Blair is not under any obligation to keep you advised of such changes. The index performance shown is for illustrative purposes and is not intended to represent the performance of any account or investment strategy managed by William Blair & Company.

	4Q	1 Year	Since Incep
Township Trustees of Schools	0.78	-0.13	0.09
BA/ML 1-Year Treasury Note Index	0.01	0.26	0.27
Excess Performance	**0.77**	**-0.39**	**-0.18**

Quality Rating Distribution



Sector Weights



Characteristics

	Township Trustees of Schools	BA/ML 1 Year Treasury Note Index
Effective Duration	1.41	1.00
Convexity	-0.50	0.01
Average Yield	1.57%	0.16%

**Includes cash and money market holdings*

Inception date 10/11/2012.

Performance shown is gross of investment management fees. Past returns are no guarantee of future performance. Performance for periods greater than one year is annualized. The Bank of America Merrill Lynch 1-Year Treasury Note Index is an unmanaged index tracking a 1-year U.S. government securities. Characteristics & sector weights source: BlackRock Solutions.

We are positioned neutral on interest rates with the portfolio's duration toward the median of the range in which it is maintained. We believe that interest rates will remain at lower levels over the next two years, as the FOMC continues to state that it will maintain the federal funds rate at lower levels until the unemployment rate declines below 6.5% and inflation expectations are well-anchored.

We are allocated to agency mortgage-backed securities. We seek pools with better-than-market convexity characteristics through favoring pools with above-market coupon rates comprised of either low loan balances or seasoned pools and avoiding the generic, current-coupon pools that dominate the Mortgage Index. We continue to avoid the segments of the MBS market that the FOMC purchased in its quantitative easing programs.

We hold an allocation to asset-backed securities issued by "Tier 1" issuers. We define "Tier 1" issuers as companies with adequate scale and financial resources and that have a reliance on the asset-backed market. Asset-backed securities have appeal because they are amortizing instruments – they distribute cash flows monthly, allowing for more rapid reinvestment in a rising rate environment. Within the sector, we hold an allocation to some floating-rate instruments to help protect principal in a rising rate environment.

We maintain an allocation to investment-grade corporate bonds (rated "A" or higher), as we believe the sector offers attractive yields and diversification benefits. We emphasize companies with positive free cash flow and strong and experienced management teams. We believe that certain names in the financial sector offer value, and we are encouraged by the improvement of balance sheets within the sector despite the regulatory issues facing the industry.

Data as of December 31, 2013. Information subject to change without notice. Not intended as investment advice.