

Pioneer High Yield Fund

Performance Analysis and Commentary

December 2011

Fourth Quarter Review

- The Fund's Class A shares returned 6.72% at net asset value during the fourth quarter, while the Fund's benchmarks, the Bank of America Merrill Lynch (BofA ML) High Yield Master II Index and the BofA ML All-Convertibles Speculative Quality Index, returned 6.18% and 4.64%, respectively.
- U.S. economic data, including an estimated gross domestic product (GDP) number of more than 3%, improved during the quarter – fueled by stronger-than-expected consumption – as the economy overcame ongoing concerns about the Euro-zone crisis. Risk markets rallied, particularly in the U.S.
- The portfolio's exposure to consumer cyclicals, capital goods, and technology were beneficial to performance during the quarter. Conversely, the Fund's defensive positions underperformed, with health care and energy hurting relative returns.

Improving economic data in the U.S., including gross domestic product (GDP) growth estimated at better than 3%, was fueled by stronger-than-expected consumption in the fourth quarter, as the economy overcame ongoing concerns about the Euro-zone crisis. Risk markets rallied during the quarter, particularly in the U.S., as the Standard & Poor's 500 Index (the S&P 500) returned 11.80% over the three months ended December 31, 2011. Consumption, along with consumer confidence, improved during the fourth quarter, buoyed by stronger employment data: weekly unemployment claims had declined to below 400,000 in the final weeks of 2011, while non-farm payrolls had risen by 200,000 as of year-end.

Treasury yields fell slightly during the fourth quarter, with the 10-year Treasury yield declining from 1.93% to 1.87%. U.S. high yield, as measured by the BofA ML High Yield Master II Index, returned 6.18% during the quarter, as spreads narrowed from 841 basis points (bps) to 723 bps. Lower-quality issues outperformed, with CCCs returning 8.07% during the quarter, easily outpacing BBs and single Bs, which returned 5.54% and 6.30%, respectively. Convertible bonds, another focus for the Fund, finished in positive territory for the quarter but still underperformed high yield, as the BofA ML All-Convertibles Speculative Quality Index returned 4.64%.

Sector Allocation and Security Selection

As of December 31, 2011, the Fund had 54% of its assets in high-yield bonds, 25% in convertibles, and 13% in equities. The convertible bond segment of the portfolio contributed 122 bps to relative returns during the fourth quarter, as security selection performance surpassed that of the benchmarks. The portfolio's exposure to consumer cyclicals, capital goods, and technology were beneficial to performance. Conversely, the Fund's defensive positions underperformed, with health care and energy hurting returns.

Regarding the Fund's fixed-income allocation, positive security selection in the energy, telecommunications, and consumer non-cyclical sectors proved very helpful for performance; however, security selection in real estate detracted from results. A portfolio underweight to banking and financial services helped performance, as those areas lagged the overall market.

Equities added 132 bps to the Fund's returns during the quarter. Within the equities allocation, materials was the best-performing sector, while health care was the worst. Municipal bond holdings subtracted -92 bps from performance, as the Fund's allocation to municipal airport bonds was a detractor. Bank loans also hurt performance, costing the portfolio -21 bps, as the sector underperformed high yield. The Fund's managers use these sectors to help augment performance and to provide additional sources of portfolio diversification* and alpha. (Alpha is a measure of performance on a risk-adjusted basis. Alpha takes the volatility of a mutual fund and compares its risk-adjusted performance to a benchmark index. The excess return of a fund relative to the return of a benchmark index is a fund's alpha.)

* Diversification does not ensure a profit or protect against a loss in a declining market.

Notable individual investments that helped boost the Fund's performance during the quarter included the convertible bonds of WESCO International, an electrical product distributor that reported a 60% jump in net income; the convertible bonds of industrial manufacturer Roper Industries, due to rising profits and an increase in guidance; and the common stock of diversified chemicals producer LyondellBasell, after the firm announced a debt buyback and special dividend. Securities subtracting from the Fund's performance included the convertible bonds of Vertex Pharmaceuticals, on increased competition concerns for their Hepatitis C drug; the corporate bonds of Lantheus Medical Imaging, after the firm lowered guidance; and municipal bonds backed by American Airlines (no longer in the portfolio), after the company announced it was going into bankruptcy.

Current Outlook and Positioning

We believe the U.S. economy will experience modest growth of more than 2% in 2012, a rate consistent with slow, protracted recoveries from "balance sheet"-caused recessions. Consumption data has exceeded expectations, reflecting an improving employment situation, the benefits of the payroll tax cut enacted at the beginning of 2011, and declining gasoline prices that also occurred earlier in the year. While Europe may enter (or already be in) a recession, growth in emerging markets may be nearing a bottom and could improve in response to the lagged effects of monetary easing among emerging countries that began last August.

The greatest risk to our forecast is the possible contagion effects of the European sovereign-debt and banking crisis. We believe the European Union must effect a comprehensive solution that includes recapitalizing the banks, ensuring funding for troubled sovereigns, achieving a workable fiscal and economic integration, and improving labor competitiveness in southern Europe, before the crisis can be defused.

While there has been increased volatility in the markets, with concerns over global growth and sovereign-debt issues front and center, we believe the economic recovery should continue into 2012 and thus will benefit commodities, capital goods, and basic materials companies. We have positioned the portfolio accordingly.

In managing the Fund we take a value approach, in that we aim to see the Fund paid for the risks we are taking. The Fund is U.S.-centric, which allows it to stay clear of many of the debt problems overseas. In addition, portfolio exposure to the banking and financial services sectors was just over 3% at the end of the year, compared with 10% for the BofA ML High Yield Master II Index, and so the Fund is underweight in the sectors with much of the headline risk and direct exposure to Europe. The Fund does take a total return approach, and so it will own convertible bonds, and if risk-related assets (as well as high-yield assets) sell off, the Fund typically will come under pressure, too. In general, it is our intent to keep the Fund fully invested, thus we do not typically run a high cash position in the portfolio. We believe our investors invest in the Pioneer High Yield Fund to obtain exposure to the high-yield market. Therefore, if the Fund ran a high cash position, that could alter the overall asset allocation strategy for the investor.

We continue to deem U.S. high-yield and convertible bonds attractive. Corporations, particularly in the U.S., have both attractive valuations and strong fundamentals. Revenue growth and tight cost controls may allow U.S. companies, as they have over the past few years, to enjoy continued improvement in their earnings and balance sheets. Moreover, the Federal Reserve Board's commitment to continued low interest rates, coupled with modest economic growth, should continue to support risky assets such as high-yield corporate bonds. High-yield spreads remain wide to long-term averages, while projected defaults remain well below long-term averages. Although the convertibles market has been shrinking as corporations opt to finance in the bond market at record-low yields, we think convertibles offer value. Finally, we also find equities and bank loans compelling, given their valuations.

We believe the Fund's ability to invest in the most attractive areas of the corporate capital structure gives it the potential for outperformance, with limited volatility, by taking advantage of market inefficiencies.

Performance Review

Pioneer High Yield Fund Class A shares returned 6.72% at net asset value during the fourth quarter, while the Fund's benchmarks, the Bank of America Merrill Lynch (BofA ML) High Yield Master II Index and the BofA ML All-Convertibles Speculative Quality Index, returned 6.18% and 4.64%, respectively. Over the full calendar year ended December 31, 2011, the Fund's Class A shares returned -1.75% at net asset value, while the BofA ML High Yield Master II Index returned 4.38% and the BofA ML All-Convertibles Speculative Quality Index returned -6.87%.

Average Annual Total Returns (Class A shares)

As of December 31, 2011	(at NAV)	(at POP)	BofA ML High Yield Master II Index	BofA ML All-Convertibles Speculative Quality Index
1 year	-1.75%	-6.18%	4.38%	-6.87%
3 years	23.24%	21.33%	23.72%	26.93%
5 years	4.75%	3.79%	7.34%	2.90%
10 years	6.96%	6.46%	8.59%	7.02%

Expense Ratio

(As of prospectus dated March 1, 2011)

Gross	1.18%
Net	1.18%

Call 1-800-225-6292 or visit us.pioneerinvestments.com for the most recent month-end performance results. Current performance may be lower or higher than the performance data quoted.

The performance data quoted represents past performance, which is no guarantee of future results. Investment return and principal value will fluctuate, and shares, when redeemed, may be worth more or less than their original cost.

NAV results represent the percent change in net asset value per share. Returns would have been lower had sales charges been reflected. POP returns reflect deduction of the maximum 4.50% sales charge at the beginning of the period. All results are historical and assume the reinvestment of dividends and capital gains. Other share classes are available for which performance expenses will differ.

Performance results reflect any applicable expense waivers in effect during the periods shown. Without such waivers fund performance would be lower. Waivers may not be in effect for all funds. Certain fee waivers are contractual through a specified period. Otherwise, fee waivers can be rescinded at any time. See the prospectus for more information.

A Word about Risk:

Investments in high-yield or lower-rated securities are subject to greater-than-average risk.

When interest rates rise, the prices of fixed-income securities in the Fund will generally fall. Conversely, when interest rates fall, the prices of fixed-income securities in the Fund will generally rise.

Investments in the Fund are subject to possible loss due to the financial failure of underlying securities and their inability to meet their debt obligations.

Prepayment risk is the chance that mortgage-backed bonds will be paid off early if falling interest rates prompt homeowners to refinance their mortgages.

Forced to reinvest the unanticipated proceeds at lower interest rates, the Fund would experience a decline in income and lose the opportunity for additional price appreciation associated with falling interest rates.

At times, the Fund's investments may represent industries or industry sectors that are interrelated or have common risks, making it more susceptible to any economic, political, or regulatory developments or other risks affecting those industries and sectors.

These risks may increase share price volatility.

The Bank of America Merrill Lynch High Yield Master II Index is a commonly accepted measure of the performance of high-yield securities. The Bank of America Merrill Lynch All-Convertibles Speculative Quality Index is an unmanaged index of high-yield U.S. convertible securities. Index returns assume reinvestment of dividends and, unlike mutual fund returns, do not reflect any fees or expenses associated with a mutual fund. It is not possible to invest directly in an index.

The views expressed in this commentary are those of the portfolio manager and are subject to change at any time. These views do not necessarily reflect the views of Pioneer or others in the Pioneer organization and should not be relied upon as investment advice, as securities recommendations, or as an indication of trading intent on behalf of any Pioneer investment product.

Securities Discussed	% of Portfolio as of December 31, 2011
WESCO International, 6.00%, 9/15/29	2.85%
Roper Industries, 1.4813%, 1/15/34	1.48%
LyondellBasell Industries	1.27%
Vertex Pharmaceuticals, 3.35%, 10/1/15	1.02%
Lantheus Medical, 9.75%, 5/15/17	0.36%

Top 10 Holdings	% of Portfolio as of December 31, 2011
1. WESCO International, 6.00%, 9/15/29	2.85 %
2. Nova Chemicals, 7.875%, 9/15/25	2.24 %
3. Forest City Enterprises, 6.50%, 2/1/17	2.06 %
4. JPMorgan Chase, 1.00%, 12/20/16	1.77 %
5. Tesoro, 6.625%, 11/1/15	1.76 %
6. Forest City Enterprises, 7.00%, 12/31/49	1.64 %
7. Roper Industries, 1.4813%, 1/15/34	1.48 %
8. LyondellBasell Industries	1.27 %
9. Massey Energy, 3.25%, 8/1/15	1.23 %
10. Ford Motor, 4.25%, 11/15/16	1.11 %

The portfolio is actively managed, and current holdings may be different. The holdings listed should not be considered recommendations to buy or sell any security listed.

Before investing, consider the Fund's investment objectives, risks, charges and expenses. Contact your advisor or Pioneer Investments for a prospectus or summary prospectus containing this information. Read it carefully.

The investments you choose should correspond to your financial needs, goals, and risk tolerance. For assistance in determining your financial situation, please consult an investment professional.

Not FDIC insured • May lose value • No bank guarantee