NORTHERN TRUST

Highlighting attribution, economic and market analysis

HIGH YIELD FIXED INCOME QUARTERLY UPDATE

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SUMMARY:

- **Northern Trust's High Yield Fixed Income Fund underperformed the Bloomberg Barclays High Yield U.S. Corporate 2% Issuer Capped Index in the second quarter.**
- **The high yield market's solid second-quarter were supported by accelerating revenue and earnings growth. The trailing 12-month default rate is expected to continue to decline, and defaults remain concentrated in a few sectors of the market.**
- **The evolution of new government policies, monetary policy and commodity prices will remain the primary drivers of returns moving forward.**

PHILOSOPHY

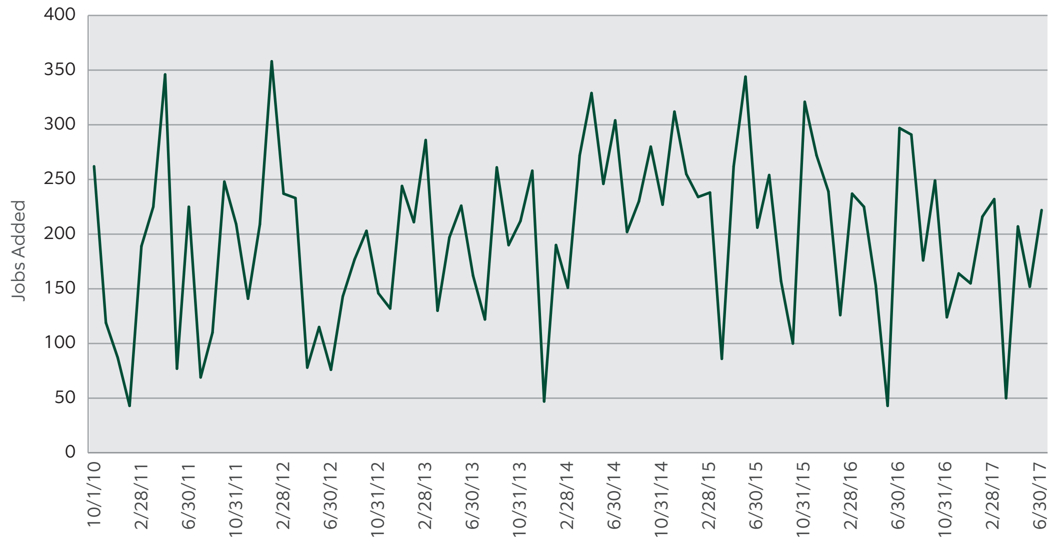
Northern Trust's active high yield fixed income group manages portfolios in an effort to generate returns consistent with the high yield market. We use a total return approach to generate alpha through fundamental credit analysis, security selection and sector allocation. We do not invest in equities, leverage or derivatives. Our investment process is designed to preserve capital and limit risk by constructing well diversified investment portfolios that reflect our views on the economy, fiscal and monetary policy, and market valuations.

Over time, the Fund has generally been positioned in the mid-range of the credit quality spectrum of the market. The highest quality securities carry more interest rate risk and the lowest rated securities carry credit and market volatility risk. Over an extended period of time, management of credit and interest rate risk is critical for performance.

ECONOMIC AND MARKET BACKDROP: STRONG LABOR MARKET

Global economic growth improved in the second quarter, providing a stable foundation for financial markets, but overall economic growth remained slow. The U.S. labor market continued as one of the brightest spots, adding an average of 180,000 jobs each month in 2017's first half. At 4.4%, the unemployment rate is close to its lowest level in 16 years.

EXHIBIT 1: NFP (NONFARM PAYROLL) JOBS ADDED BY MONTH: OCTOBER 2010 TO JUNE 2017



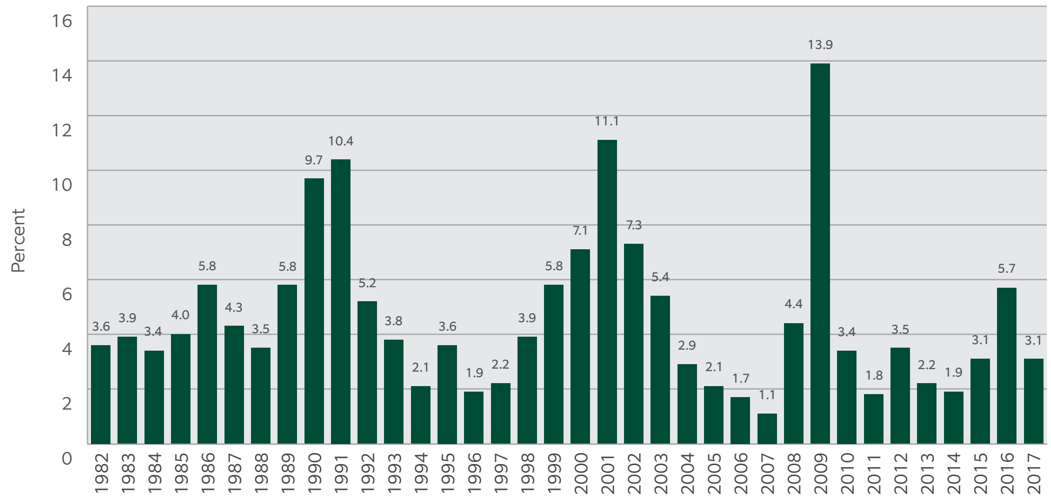
SOURCE: Bureau of Labor Statistics, Bloomberg Barclays

In June, the Federal Reserve raised the federal funds rate for the second time in 2017, despite the backdrop of slow economic growth. This makes the rate's targeted range 1.0% to 1.25%. Fed Chair Janet Yellen noted that the Fed is closely monitoring inflation and inflation expectations, both of which have been declining in 2017. The Fed believes the labor market is tightening and wages may begin to accelerate because the unemployment rate is low and we're entering the eighth year of economic expansion. After the meeting, Yellen said that she believes the Fed's accommodative monetary policies should continue to be removed slowly.

PERFORMANCE

The high yield market posted a solid return in the second quarter. Better-than-expected global economic growth provided a positive backdrop for high yield. The end of the cycle of defaults tied to falling commodity prices has improved overall default rates and the upgrade/downgrade ratio.

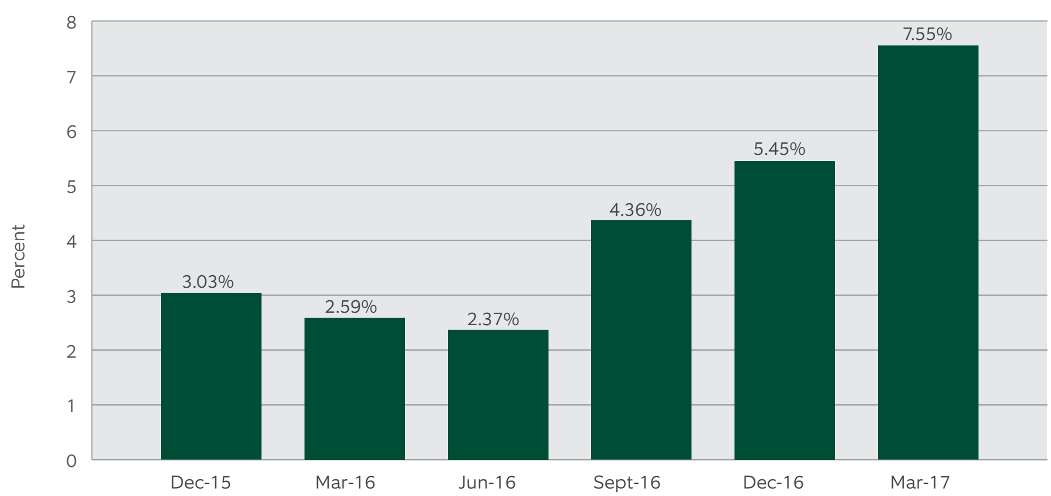
EXHIBIT 2: MOODY'S U.S. SPECULATIVE GRADE DEFAULT RATE



As of 6/30/17
SOURCE: Northern Trust Fixed Income; Bloomberg Barclays

The most important factor behind the improvement in companies' creditworthiness has been their operating performance. A few years ago, companies were reporting anemic sales growth, with earnings growth largely the result of cost cutting. This has changed over the last several quarters. Firms have recently been reporting strong revenue and earnings growth. The graph below shows the positive trend in revenue growth. In 2017's first quarter, earnings grew 15%, double the revenue growth of 7.55%. This is a significant factor supporting high yield assets.

EXHIBIT 3: YEAR-OVER-YEAR REVENUE GROWTH FOR HIGH YIELD COMPANIES

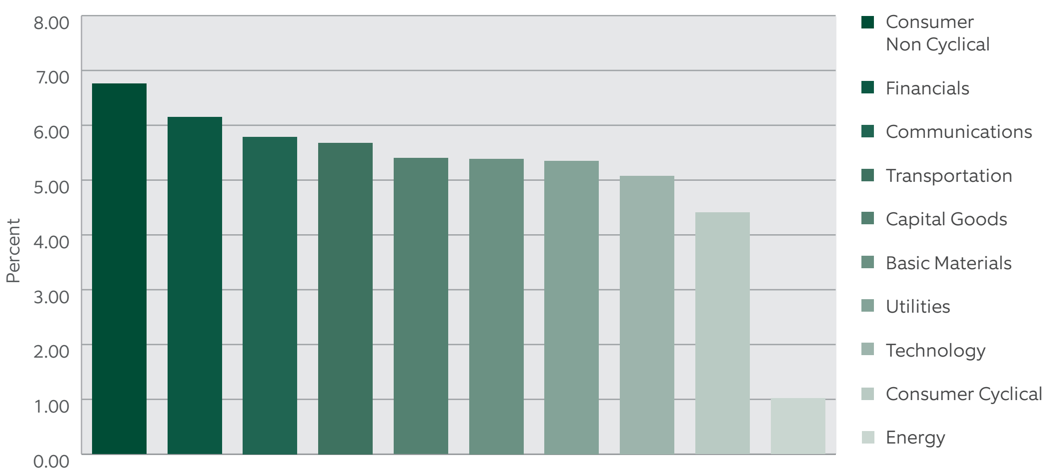


SOURCE: Bloomberg Barclays Indices, Capital IQ

The Fund's 1.39% return trailed the 2.17% return of the Bloomberg Barclays U.S. Corporate High Yield 2% Issuer Capped Index. Sector allocation was a more important driver of performance than credit quality. Overweight positions in banking and health care, along with an underweight in media non-cable contributed to performance. Overweight positions in oil field services and independent energy detracted.

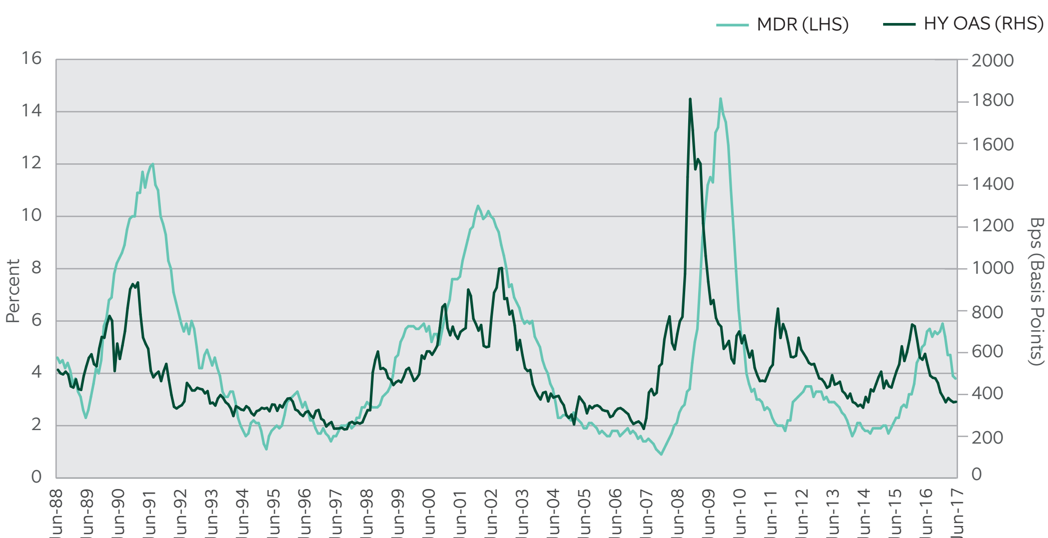
Looking at index returns by credit quality, the BB rating category performed best, followed by Ca-D, CCC and B rated securities, respectively. The Fund was underweight BB securities and overweight B and CCC rated securities. The yield to worst on the market ended the quarter at 5.62%. By rating, BB's closed the quarter yielding 4.23%, B's at 5.56%, and CCC's at 8.77%.

EXHIBIT 4: HIGH YIELD SECTOR YTD RETURNS



As of 6/30/17
SOURCE: Northern Trust Fixed Income, Bloomberg Barclays Live

EXHIBIT 5: HIGH YIELD INDEX OPTION ADJUSTED-SPREAD VERSUS MOODY'S DEFAULT RATE



SOURCE: OAS is from Bloomberg Barclays Capital 2% Capped Index,
Defaults is from Moody's

The Fund maintained exposure to bank loans in select situations that offered attractive relative value. Bank loans are an asset class that's closely aligned with high yield bonds. Both represent an extension of credit to non-investment-grade borrowers. Approximately 80% of high yield issuers also have bank loans on their balance sheets. These instruments provide portfolio managers with additional flexibility, particularly when market volatility is high.

While both high yield bonds and bank loans may provide investors with the potential for more income than investment-grade bonds, a few key differences we believe make bank loans a more suitable and less volatile investment. As floating rate instruments priced off Libor, loans effectively mitigate interest rate risk in a way that fixed rate bonds can't. They're also secured by the assets of the borrower and hold a senior position in an issuer's capital structure, creating an instrument with less credit risk. Lower interest rate and credit risk tends to help bank loans to exhibit less volatility than high yield bonds while still providing the potential for more income than investment-grade issuers.

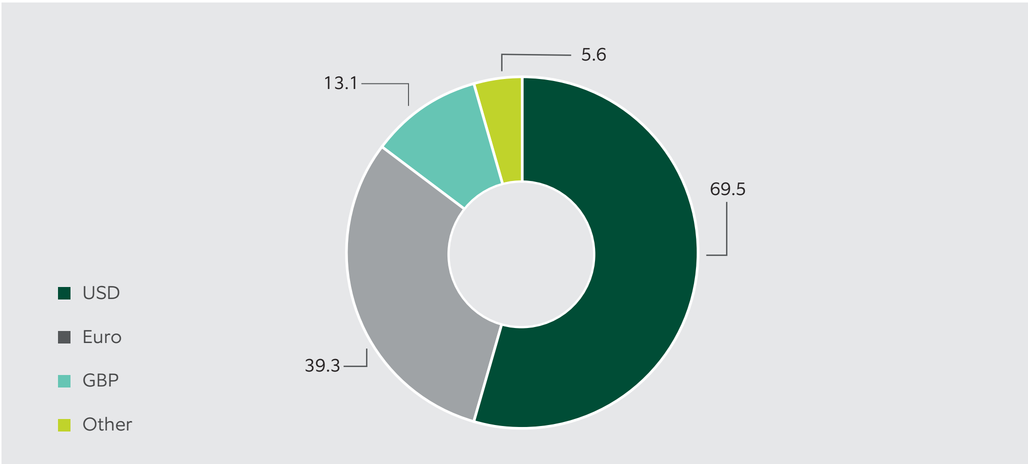
SECTOR SPOTLIGHT: FINANCIALS

Financial services is a large and important sector for high yield. It has climbed from less than 2% of the pre-financial-crisis Bloomberg Barclays U.S. Corporate High Yield 2% Issuer Capped Index to more than 10% today, due to the combination of new securities, fallen angels and new security types. With this growth in the index, the Fund has similarly increased its exposure to financial services. A new type of deeply subordinated global bank instrument—specifically, additional Tier 1 (AT1) securities from European banks—was the primary reason for the increase.

These new securities were created when new, post-crisis banking regulations required banks globally to issue deeply subordinated securities designed to absorb extraordinary losses. These securities would be "bailed-in" to support the capital base of the bank and avoid the need for public (taxpayer) support should the need arise. These bail-in securities were accompanied by other reforms, including liquidity buffers, stress testing and generally strong banking supervision to avoid another crisis. These banks were required to come to market to fund these securities at a time when they otherwise would not have needed to issue. This gave investors the opportunity to be price makers rather than price takers, if they understood the new bonds' structures, issuers and the market presence.

This market grew from virtually zero to over €100 billion over the last few years. It is almost 70% U.S. dollar denominated (see graph).

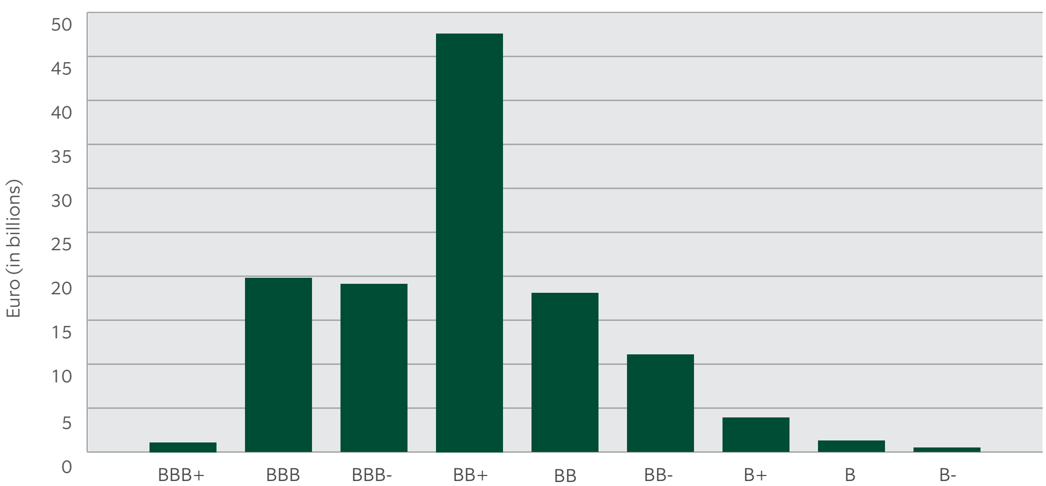
EXHIBIT 6: AT1 CURRENCY BREAKDOWN (IN BILLIONS)



As of 6/30/17
SOURCE: JP Morgan

This issuance occurred while the underlying financial institutions were dramatically improving their capital, liquidity and risk management programs. Given the vagaries of the rating process, the vast majority of these securities are rated several notches below the intrinsic creditworthiness of the underlying bank, thereby making them eligible for the Bloomberg Barclays U.S. Corporate High Yield 2% Issuer Capped Index. Also, this issuance came in benchmark (at least $500 million) size, making the securities a relatively liquid segment of the high yield market.

EXHIBIT 7: AT1 RATINGS DISTRIBUTION



As of 6/30/17
SOURCE: JP Morgan

We expect improvement in the underlying fundamentals for European banks. While stronger regulation from the European Central Bank continues to evolve, regulation is but one of the factors we take into account before investing in these banks, especially for these deeply subordinated securities. First, we consider the banking system and economic situation the bank faces. While the national champion banks have issued AT1 securities, banking systems such as the Nordics, the U.K. and France support large issuance from even the third- or fourth-largest players. With the economic outlook for Europe looking the best it has for some time, this adds a tailwind to the fundamentals of these issuers. In addition to these fundamental considerations, the market technicals for this investment class have similarly improved, especially in terms of the structure of these securities.

These securities strongly align AT1 investors with equity holders and management—a very rare and powerful alliance. If certain earnings and distributable reserves (capital) levels are not maintained, deferral of any AT1 interest coupons is mandatory until the deficiency is resolved. Coupons are not cumulative so if they are skipped they are gone forever. However, if an AT1 coupon is skipped, common equity holder dividends and, in some cases management bonuses are prohibited from being paid. This alignment provides a powerful incentive to maintain the levels necessary to pay AT1 coupons.

That's all great, but what about performance? The average coupon for all USD AT1 issuance has been 6.97% at issuance, and the current USD yield on these issues is 5.1% with an average dollar price of $106, according to the Credit Suisse. Assuming these bonds were issued at par two years ago, their average total return has exceeded 10% annually. In comparison, the average yield for the high yield market is currently about 5.8% and for BBs is about 4.3%.

TABLE 1: PERFORMANCE AS OF JUNE 30, 2017

NORTHERN FUNDS	1-Year Return	3-Year Avg. Annual Return	5-Year Avg. Annual Return	10-Year Avg. Annual Return	Avg. Annual Since Inception	Gross Expense Ratio	Net Expense Ratio	Inception Date
Northern High Yield Fixed Income[1, 2]	11.40%	2.55%	5.84%	5.90%	5.94%	0.82%	0.81%	12/31/98
Benchmark: Bloomberg Barclays U.S. Corporate High Yield 2% Issuer Capped Index	12.69%	4.50%	6.90%	7.76%	7.16%	–	–	–

Performance quoted represents past performance and does not guarantee future results. Investment return and principal value will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than that shown here. Performance data current to the most recent month end is available by calling 800-595-9111.

The Advisor has agreed to reimburse certain expenses of the Fund. The contractual reimbursement arrangement is expected to continue until at least July 31, 2017. After this date, the contractual arrangements may be terminated if it is determined to be in the best interest of the Fund and its shareholders. In the absence of fee waivers, yield, total return, growth since inception and dividends would have been reduced. Total return is based on net change in NAV assuming reinvestment of distributions.

Annualized for periods greater than one year.

[1]**Bond Risk:** Bond funds will tend to experience smaller fluctuations in value than stock funds. However, investors in any bond fund should anticipate fluctuations in price, especially for longer-term issues and in environments of rising interest rates.

[2]**High-Yield Risk:** Although a high-yield fund's yield may be higher than that of fixed-income funds that purchase higher-rated securities, the potentially higher yield is a function of the greater risk that a high-yield fund's share price will decline.

Alpha: Measures a fund's risk-adjusted performance and represents the difference between a fund's actual performance and its expected performance, given its level of risk.

Basis Points (bps): Unit of measure used in quoting yields, changes in yields or differences between yields. One basis point is equal to 0.01%, or one one-hundredth of a percent of yield and 100 basis points equals 1%.

Barclays U.S. Corporate High Yield 2% Issuer Capped Index is an unmanaged index that measures the market of U.S. dollar-denominated, non-investment-grade, fixed-rate, taxable corporate bonds. It is a version of the Barclays High Yield Corporate Bond Index except it limits its exposure of each issuer to 2% of the total market value and redistributes any excess market value Index-wide on a pro-rata basis.

Beta: Beta represents the systematic risk of a portfolio and measures its sensitivity to a benchmark.

Bond Risk: Bond funds will tend to experience smaller fluctuations in value than stock funds. However, investors in any bond fund should anticipate fluctuations in price, especially for longer-term issues and in environments of rising interest rates.

ERISA: Employee Retirement Income Security Act of 1974 (ERISA) enacted rules for U.S. qualified plans to help protect the retirement assets.

Option-adjusted spread (OAS) is the difference in yield between two fixed income securities (generally between a fixed income security with credit risk and a comparable treasury bond), adjusted for differences in duration and embedded options.

Yield-to-Worst (YTW) is the lowest potential yield that can be received on a bond assuming options available to the issuer are exercised.

References to specific securities within the utilities sector were made in an effort to highlight relevant news in the high yield sector during the period. For a full list of holdings for Northern High Yield Fixed Income Fund, please visits northernfunds.com. Holdings are subject to change and current and future portfolio holdings are subject to risk.

Please carefully read the prospectus and summary prospectus and consider the investment objectives, risks, charges and expenses of Northern Funds before investing. Call 800-595-9111 to obtain a prospectus and summary prospectus, which contains this and other information about the funds.

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