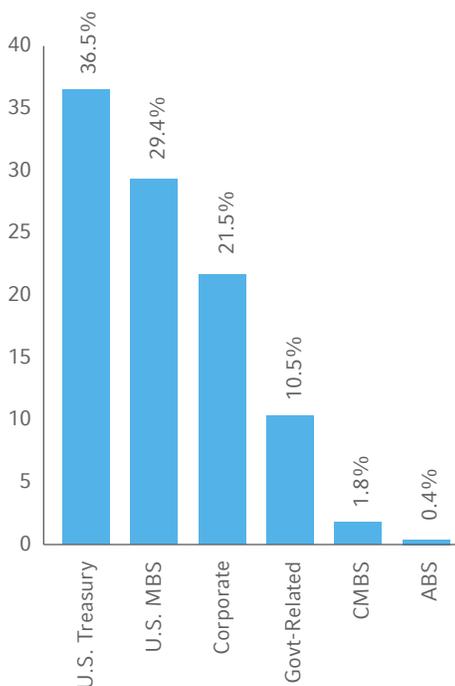


## HELP BALANCE THE EFFECTS OF RISING INTEREST RATES ON BOND PRICES

# Active management can help

**BARCLAYS U.S. AGGREGATE BOND INDEX SECTOR BREAKOUT**



**Fixed income opportunities not included in the Barclays U.S. Aggregate Bond Index:**

- › Non-Agency Mortgage Backed Securities
- › Global High Yield
- › Bank loans
- › Debt issued by foreign countries
- › Currencies

Source: Barclays Live, as of June 30, 2013.

Indexes are unmanaged and cannot be invested in directly. Data represents past performance, is not a guarantee of future performance, and is not indicative of any specific investment.

U.S. Treasury - Publicly issued obligations of the U.S. Treasury; U.S. MBS (U.S. Mortgage-Backed Securities) - U.S. agency mortgage-backed bonds; Corporate - Publicly issued

Russell's economists are forecasting a 0.5% increase in the 10-Year Treasury yield by the end of 2013. What if interest rates were to rise by twice that amount, to 1%?

Investors may be wondering how these rate increases might affect their portfolio, given that the price of a bond portfolio/security moves in the opposite direction of the change in interest rates.

The interest rate changes are likely to impact bond portfolios. However, active bond managers have levers they can pull to help balance the effects of a rising interest rate environment on a bond portfolio. Using a portfolio similar to the Barclays U.S. Aggregate Bond Index as an example, we discuss three of these active management strategies:

### 1. Decrease duration

Duration can be used to measure a bond's sensitivity to interest rate changes. Prices of bonds with shorter durations don't decline as much when interest rates rise.

- › The larger the duration (stated in number of years), the more sensitive the price of the bond security/portfolio is to changes in interest rates (which moves in opposite direction of the change in interest rates).
- › Portfolio duration 5.0 years and 3.5% coupon (interest income)
  - 1% rise in rates → loss of -1.5% in portfolio value
  - $(1\% \times 5.0) + 3.5 = -1.5$  (interest rate change times portfolio duration, plus coupon rate)
  - Bear in mind that the total return of a fixed income portfolio/security is equal to the change in the price of the portfolio/security plus the income it pays (coupon payments).

- › Shorten duration to 4.5 years

1% rise in rates → loss of -1.0% in portfolio value (duration adjustment tempers loss by 1/3)

$$(1\% \times 4.5) + 3.5 = -1.0\%$$

### 2. Adjust credit exposure

Investing in bonds with higher yields and higher risks means portfolios may earn more income, which adds to a bond's total return. This can help offset price declines coming from interest rate increases.

- › Attractive opportunities are often available in certain sectors, such as non-agency mortgage-backed securities (securities backed by mortgages and issued by private, non-government issuers) and corporate bank loans (debt from companies with below-investment grade credit ratings, which is typically secured with a lien on the company's assets, generally senior in rank to the company's other

corporate securities; Govt-Related - Agency, local authority, USD denominated sovereign debt; CMBS (Commercial mortgage-backed securities) - Securities that represent interests in pools of commercial mortgages; ABS (Asset backed securities) - Bonds backed by a specified pool of underlying assets.

debt and offers higher credit ratings than high yield bonds). Of course, corporate bank loans and non-agency mortgage-backed securities expose investors to the usual risks inherent in bond investing (interest rate, credit, repurchase and reverse transaction risks). In addition, non-agency MBS also have volatility, limited liquidity, prepayment, non-payment and increased default risks; bank loans, like most high yield securities, are subject to higher volatility and higher risk of default than investment grade bonds.

### 3. Go global

Increasing country and currency exposure can help diversify the portfolio against some of the effects of rising interest rates in the U.S. Note that both these strategies may introduce country-specific risks.

- › Increasing country and currency exposure by buying government bonds of high real yielding countries (yields after expected inflation) and engaging in active currency strategies, as a way to help diversify the portfolio against some of the effects of rising interest rates in the U.S.
- › Many emerging market countries offer government bonds with high real yields (yields after expected inflation).
- › Both of these strategies can reduce correlation with U.S. equity and credit risk (meaning the equity and fixed income parts of the portfolio may move in opposite direction with one another, thereby potentially increasing the diversification of the overall portfolio)

› Access more information at [www.Russell.com](http://www.Russell.com) or through your financial professional.

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#### Important information and disclosures

*Please remember that all investments carry some level of risk, including the potential loss of principal invested. They do not typically grow at an even rate of return and may experience negative growth. As with any type of portfolio structuring, attempting to reduce risk and increase return could, at certain times, unintentionally reduce returns.*

Investments that are allocated across multiple types of securities may be exposed to a variety of risks based on the asset classes, investment styles, market sectors, and size of companies preferred by the investment managers.

Investors should consider how the combined risks impact their total investment portfolio and understand that different risks can lead to varying financial consequences, including loss of principal.

Bond investors should carefully consider risks such as interest rate, credit, repurchase and reverse repurchase transaction risks. Greater risk, such as increased volatility, limited liquidity, prepayment, nonpayment and increased default risk, is inherent in portfolios that invest in high-yield ("junk") bonds or mortgage backed-securities, especially mortgage-backed securities with exposure to subprime mortgages. Investment in non-U.S. and emerging market securities is subject to the risk of currency fluctuations and to economic and political risks associated with such foreign countries.

Strategic asset allocation and diversification do not assure profit or protect against loss in declining markets.

Barclays U.S. Aggregate Bond Index: An index, with income reinvested, generally representative of intermediate-term government bonds, investment grade corporate debt securities, and mortgage-backed securities.

Forecasting represents predictions of market prices and/or volume patterns utilizing varying analytical data. It is not representative of a projection of the stock market, or of any specific investment.

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