

Market Insight



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Voya Unconstrained Fixed Income: Perspectives on Duration

Establishing Risk Parameters

The unconstrained fixed income universe has come under much scrutiny from investors during its short existence. Current product offerings in the space generally focus on short-term returns and protection against rising rates, producing results that are not all that attractive.

In our view, the primary function of fixed income is to protect investors' wealth and achieve moderate returns over the long term while avoiding downside risk. When investors instead focus on maximizing short-term returns, they do so at the expense of taking on more risk, particularly in today's environment of low yield potential and turbulent credit markets.

We believe establishing prudent risk tolerances, before return expectations, produces more stable and reliable investment returns. This is the guiding principle behind the Voya Unconstrained Fixed Income strategy: first identify a rational level

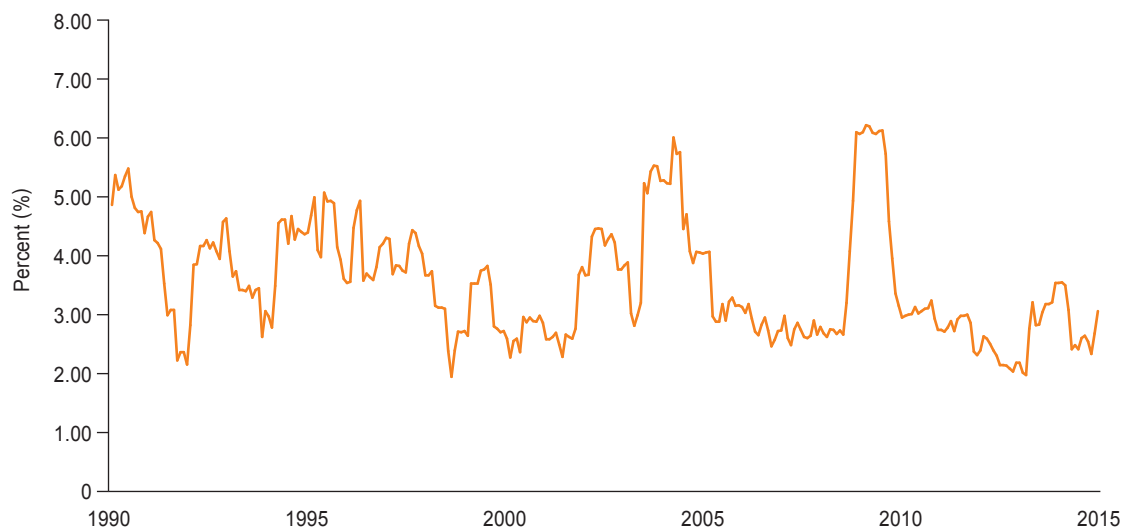
of risk tolerance for the client and adjust return expectations in each market for that stated risk tolerance. Then, using the risk tolerance and return expectations, craft an optimized portfolio of fixed income securities that seeks to produce stable returns in any market environment.

Rationale for Risk Objective

The central objective of the Voya Unconstrained Fixed Income strategy is not simply to protect investors from rising rates, but also to produce positive performance regardless of the market environment. By taking a longer-term perspective the strategy is able to establish a clear risk tolerance before considering specific, quantifiable return objectives. Accordingly, for the unconstrained strategy we have set an absolute risk objective of 200–700 basis points (bp), which is equivalent to the long-term volatility range of the Barclays U.S. Aggregate Bond Index (Figure 1).

Figure 1: The risk objective of Voya Unconstrained Fixed Income derives from market-based measures of volatility.

Rolling 1-year Barclays U.S. Aggregate Bond Index Volatility



Source: Barclays. Data as of March 31, 2016

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Even with the added flexibility afforded by such an approach, we believe an unconstrained strategy still should behave like a fixed income investment and should exhibit a risk profile consistent with traditional fixed income assets. Using risk tolerance as our primary guide, we focus on producing more reliable returns (LIBOR plus 300-400 bp) while attempting to minimize downside risk.

We intend for the unconstrained strategy to provide protection from volatile equity markets in a fashion similar to traditional fixed income strategies, as well as to produce consistent returns over a full market cycle. In addition, the flexibility of the strategy and its tightly-managed risk profile are intended to provide investors with a more stable return experience than traditional

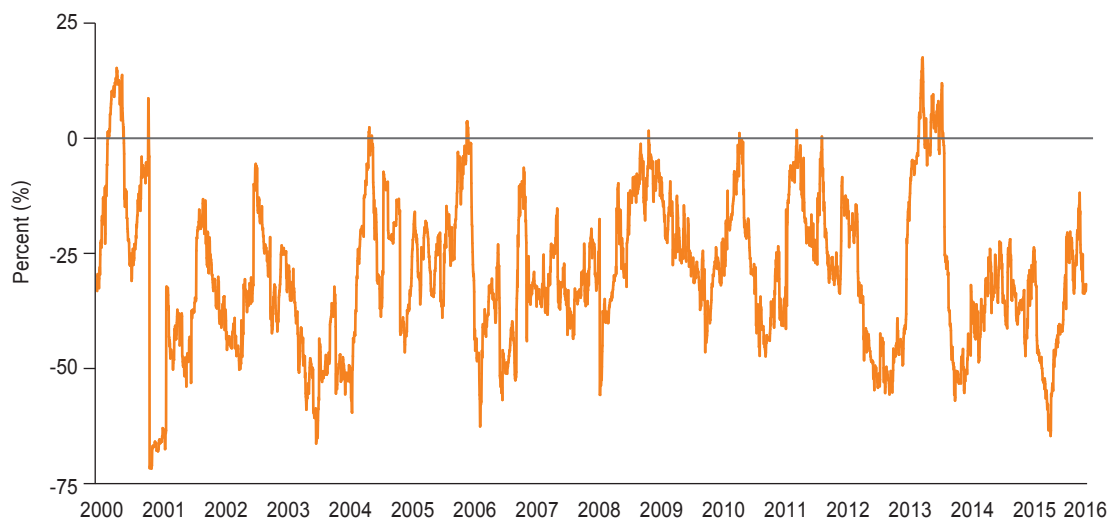
fixed income products, i.e., enhanced downside risk protection and limited volatility.

Rationale for Duration Range

With the rationale for the risk objective now established, we can move to the strategy’s central tendency for duration, which is set at two years. This is based on long-term data that demonstrate clear, recognized diversification benefits associated with mixing duration risk and credit risk. Figure 2 shows a generally negative correlation over the last 15 years between Treasury securities, a gauge of duration risk; and corporate bond spreads, a gauge of credit risk.

Figure 2: The negative correlation between credit and duration risk offers a potential diversification benefit.

Rolling 3M Correlation of U.S. 5-year and Corporate Spreads



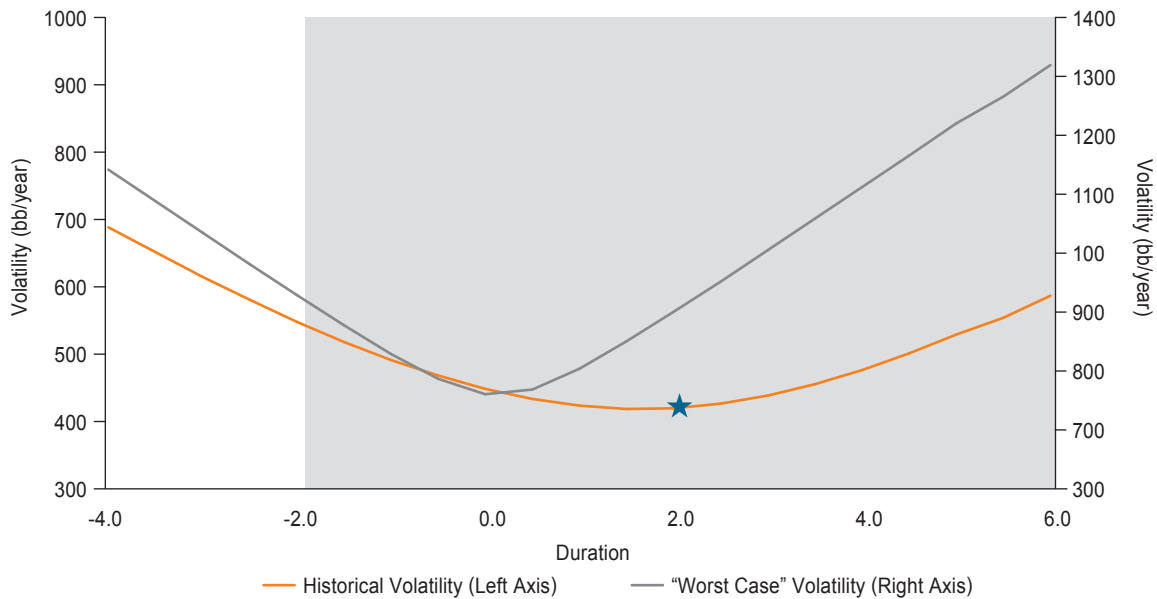
Source: Barclays. Data as of March 31, 2016

Assuming the correlation of Figure 2 holds true in the future, you can then plot the projected volatility of a hypothetical portfolio as duration changes. The starred point on the orange “historical volatility” line of Figure 3 shows that a portfolio of investment-grade and below-investment-grade fixed income securities (“diversified portfolio”) exhibits its minimum volatility at a duration of two years, which is why this point represents the strategy’s duration central tendency. Keeping credit risk constant, overall portfolio risk increases as duration rises or falls from this point. We believe two years represents an optimal balance of risk and reward over the long term.

While a duration of two years is the long-term central tendency, given the unconstrained nature of the strategy, we can still adjust duration above and below this point in the short term. However, we limit the portfolio’s range of duration to minus two to plus six years, which we have determined to be optimal for staying within the stated risk objective of 200–700 bp as outlined above. We believe this range maximizes flexibility while ensuring that the strategy remains within its risk budget even as market conditions change. A wider duration range brings significant potential to exceed the risk budget and/or limits the strategy’s flexibility.

Figure 3: Two years represents the unconstrained strategy's optimal duration.

Hypothetical Portfolio Volatility vs. Duration



Source: Voya Investment Management

This can be illustrated best by looking at a point outside the strategy's duration range. For example, the minus four year duration point has an absolute volatility just short of 700 bp. While this falls within the permitted volatility range for the strategy, it constrains the portfolio in two significant ways:

- **Provides no room to further increase credit risk —** the strategy's unconstrained mandate is designed to allow for tactical increases or decreases of credit risk from the diversified portfolio. Because credit risk and positive duration risk are negatively correlated, it follows that credit risk and *negative* duration risk are *positively* correlated. Therefore, increasing credit risk beyond the diversified portfolio would increase overall risk and likely cause the portfolio's absolute volatility to exceed the 700 bp maximum.
- **Assumes long-term correlations always hold —** while Figure 2 shows that duration and credit risk have a fairly consistent, long-term negative correlation, it also makes clear that this relationship is volatile. At times this correlation has moved close to zero and occasionally has turned positive. It cannot be assumed that the potential diversification benefits of this correlation will always hold; at certain times those benefits may erode or reverse. The grey line of Figure 3 shows what happens to portfolio risk in a worst case scenario — when the correlation

benefits in the diversified portfolio disappear. It is important to appreciate and utilize the long-term diversification benefits that correlations provide, but it also is important to recognize that these benefits are not constant or permanent. Limiting duration to the range shown in Figure 2 allows for appropriate flexibility while providing a cushion to help the portfolio comply with its absolute risk objective, should the credit/duration correlation benefits diminish.

These two points highlight the dangers of exceedingly wide duration bands. The Voya Unconstrained Fixed Income strategy's duration range is designed to stay within well-defined risk and return parameters. This design provides the necessary flexibility to tactically adjust risk exposures in the portfolio as market conditions change. We believe that centering the duration range around two years provides for optimal diversification of portfolio risks without introducing the potential for greater volatility that could result from overly wide duration bands.

Clearly defined risk tolerances, not specific return targets, are most important when approaching today's challenging fixed income markets. The Voya Unconstrained Fixed Income strategy's flexible investment mandate, guided by carefully designed risk parameters, takes account of these challenges and seeks to deliver long-term value to investors.

Principal Risks

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