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How will a rising 10-year Treasury yield impact other assets?

From the Field

Key Insights

- Predicting the impact of a rising Treasury yield on other assets is not simple as there is a nuanced relationship between rates and asset class valuations.
- Our analysis of current valuations and duration levels suggest that floating rate loans appear well-positioned to benefit from rising rates.
- Long duration bonds appear to offer an effective tool for duration management.

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Our Asset Allocation Committee (AAC) is positioned for the U.S. 10-year Treasury yield to rise. In bond parlance, we are short duration. Inflationary uncertainty, a flat yield curve, pro-growth policies, and significant deficits all point in that direction.

Predicting the impact of a rising Treasury yield on other asset classes, however, is not simple: there is a nuanced relationship between asset classes and interest rates. Below, I explain how to manage interest rate risk across asset classes by evaluating the sensitivity of asset class pairs to changes in the 10-year yield.

Given their negative duration and median relative valuation, floating rate loans currently present a compelling opportunity to capitalize on rising rates, while long-duration bonds offer an effective tool for duration management.

Estimating durations

We estimate the empirical duration of asset class pairs used for tactical asset allocation, such as value versus growth stocks, as follows:

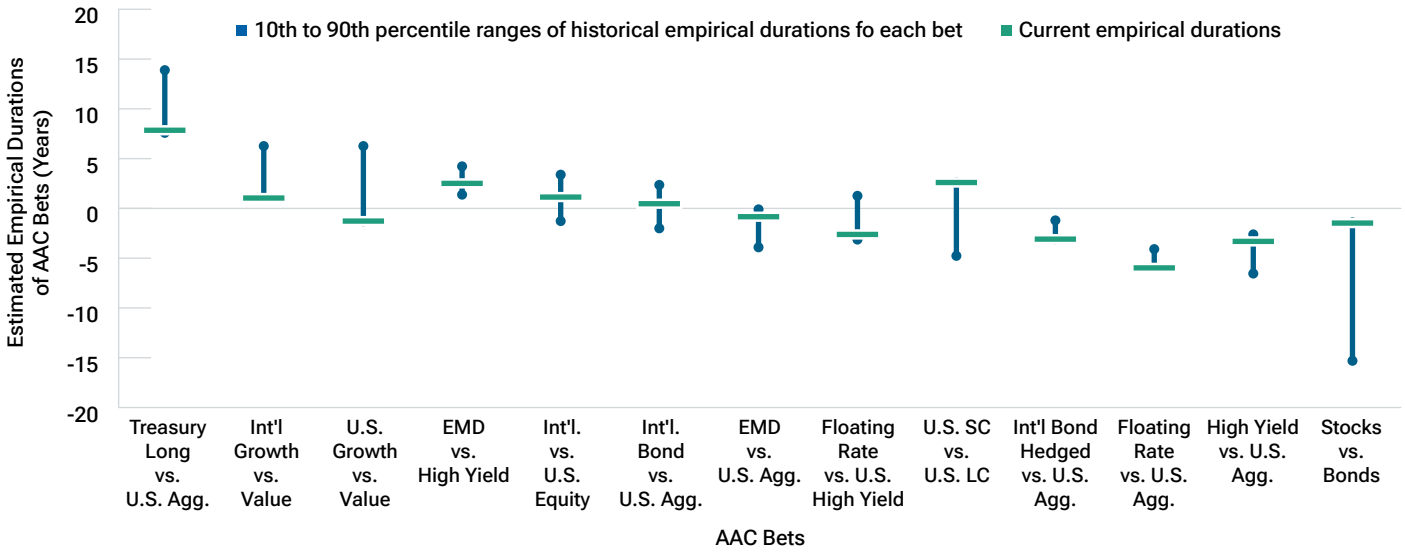
$$Value_t - Growth_t = \alpha + -Duration \times \Delta 10y_t$$ [1]

> “...there is a nuanced relationship between asset classes and interest rates.

[1] Duration is the beta estimated from an exponentially weighted regression with a six-month half-life (expanding data window), following the structure of the above equation. In other words, we give higher weight to the more recent data and place less value on older historical data. We use rolling five-day cumulative returns on the left and the rolling five-day change in the 10-year yield on the right. We do this to maximize the number of data points while reducing the noise in daily data (which includes time zone issues and day-to-day news flow idiosyncrasies). Our data starts on 1/8/2010 and will end on 2/7/2025. We ran another version of this analysis controlling for equity beta, and the results were similar (not reported here).

Bets duration vs. history

(Fig. 1) Duration estimates and historical ranges



As of February 7, 2025.
Analysis by T. Rowe Price. See "Additional Disclosures" section for additional information on the sources used.
Represents daily data from 1/8/2010 to 2/7/2025. First date for estimated empirical duration was 1/6/2012. The look-back window for percentiles is from 1/6/2012 to 2/7/2025. **Past Performance is no guarantee of future results.**

Figure 1 shows the current duration (green bars) and historical range (blue lines) for 13 asset class pairs. A positive number means that the asset class on the left tends to underperform the one on the right when the 10-year yield goes up, and vice versa for a negative number. Starting from the left, the duration of Treasury Long vs. U.S. Agg. (core investment grade) is 8. This means that when the 10-year yield increases by, say, +0.1%, Treasury Long underperforms U.S. Agg. Bonds on average by -0.8%. Also, the taller the blue line, the wider the historical range and—generally—the noisier the estimate.

The duration of the stocks versus bonds pair—the last one on the right—is notoriously unstable. It is currently -1.5 but has been as negative as -15 over our 1/8/2010–2/7/2025 period. A negative duration means that historically stocks have outperformed bonds when the 10-year yield increases. This tends to happen because rates often rise together with growth expectations (on the flipside, rates tend to come down and bonds rally when stocks sell off due to the flight-to-safety effect).

However, the negative duration is a historic average. It does not always occur. Higher rates can hurt stocks even more than bonds, especially when stock valuations are high, and there's an inflation (rather than growth) shock. Many research articles have been written on the instability of the stock-bond correlation.[2]

> "Higher rates can hurt stocks even more than bonds....

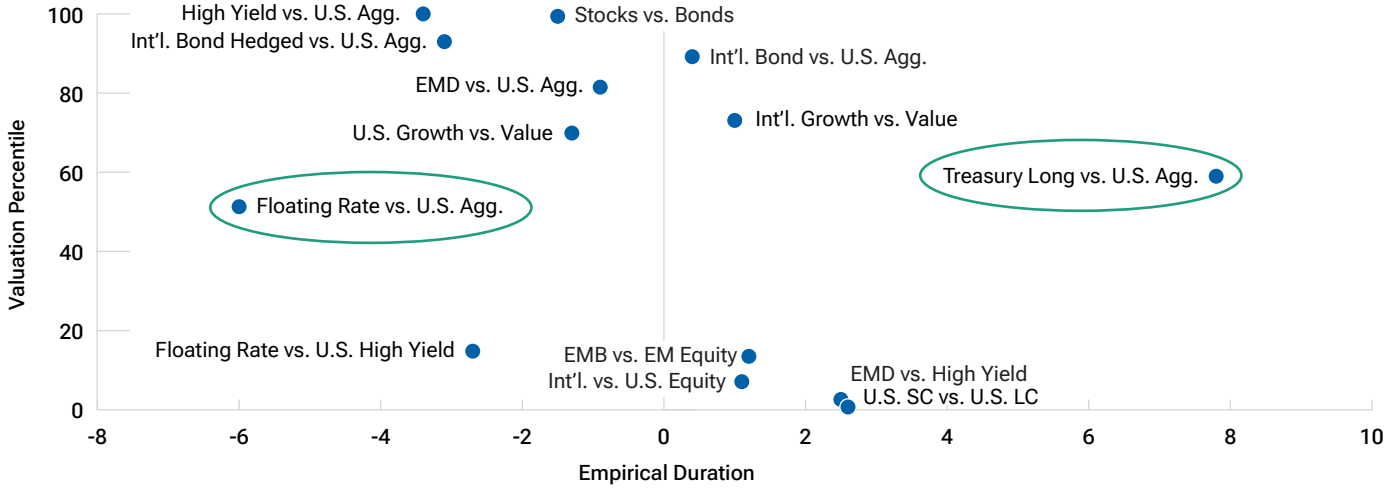
What current valuations and duration levels are telling us

Currently, the duration of U.S. growth vs. value is negative, which means growth stocks have been outperforming with rising rates. But this is an anomaly by historical standards, most likely due to the artificial intelligence theme. In theory, the cash flows of growth

[2] See, for example, Naik et al., "The stock-bond correlation," Journal of Investment Strategies, Vol 4., Number 1, December 2014.

Current asset class valuations vs durations

(Fig. 2) Two pairs stand out as attractive



As of January 31, 2025.
Analysis by T. Rowe Price. See "Additional Disclosures" section for additional information on the sources used. Forward earnings yield is used for equity valuation, and yield to worst is used for fixed income valuation. Current valuation is based on valuation data on 1/31/2025. The look-back window for valuation percentile is based on monthly data, from 1/2012 to 1/2025. Percentiles are calculated by sorting the valuation differentials for each bet.
Past Performance is no guarantee of future results.

companies are further out in the future, which means a longer duration. Plus, value often outperforms with higher rates as financials boost their net interest margins and materials and commodities companies tend to benefit from rising inflation.

Bond market duration estimates are more reliable, as evidenced by the shorter blue bars for bond asset class pairs. Right now, the most interesting duration number is for floating rate versus U.S. aggregate. It has the most negative duration of all the pairs and shows a narrow historical range. This suggests that overweighting floating rate loans could be an efficient and precise way to benefit from rising rates.

Moreover, while spreads are generally tight across credit markets, floating rate trades at a median valuation relative to the U.S. aggregate. It has been out of favor due to expectations of Fed rate cuts. However, the current trend is toward fewer rather than more cuts as inflation rears its ugly head again.

Figure 2 maps relative valuation percentiles against empirical durations for asset class pairs. Two trades appear reasonably priced and offer efficient duration management: Floating Rate vs. U.S. Agg. and Treasury Long vs. U.S. Agg, (here, you would reduce the allocation to Treasury Long). Of course, you could also consider a move from Treasury Long to Floating Rates to help reduce duration even more efficiently.

And if you think rates are coming down, reverse these trades.

Additional Disclosures

DEFINITIONS

Empirical duration is the sensitivity of the asset's return to changes in the 10-year bond yield.

Exponentially weighted regression is a formula applied in regression analysis which assumes recent data has greater importance than older historic data.

Forward Earnings Yield is the expected earnings per share (EPS) over the next 12 months divided by the current share price.

Regression models describe the relationship between measurable variables. At a basic level, a regression model allows for estimating how one variable is expected to change as another independent variable changes. The models can also help identify if it's a strong or weak relationship between the two.

Relative Valuation is the concept of comparing the price of an asset to the market value of similar assets.

Yield to Worst is the lowest possible yield an investor can receive from a bond assuming the issuer does not default.

INDICES

In the figures, the names refer to the indices as follows:

Treasury Long—Barclays US Treasury Long Index
Bonds—Bloomberg Barclays U.S. Aggregate Index
Intl. Growth—MSCI EAFE Growth Index
Intl. Value—MSCI EAFE Value Index
U.S. Growth—Russell 1000 Growth Index
U.S. Value—Russell 1000 Value Index
RAF—Real Assets Combined Index Portfolio
EQ (Equity), Stocks—a mix of 70% Russell 3000 Index, 30% MSCI ACWI ex-US
EMD (Emerging Market Debt)— J.P. Morgan Emerging Market Bond Index Global Index
EMB (Emerging Market Bonds)—J.P. Morgan Emerging Market Bond Index Global Index
HY (High Yield)—Credit Suisse High Yield Index
U.S. Floating Rate—Morningstar LSTA Performing Loan Index
EM (Emerging Markets) Equity—MSCI Emerging Markets Index
U.S. SC (Small-Cap)— Russell 2000 Index
U.S. LC (Large-Cap) S&P 500
Intl. Bond Hedged—Bloomberg Barclays Global Aggregated Ex-US Index (USD Hedged)

Please see vendor indices disclaimers for more information about the sourcing information: www.troweprice.com/marketdata

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T. Rowe Price identifies and actively invests in opportunities to help people thrive in an evolving world, bringing our dynamic perspective and meaningful partnership to clients so they can feel more confident.

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