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Janus Henderson
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Tail Risk Report

An outlook on asset classes based on potential tail gains and losses

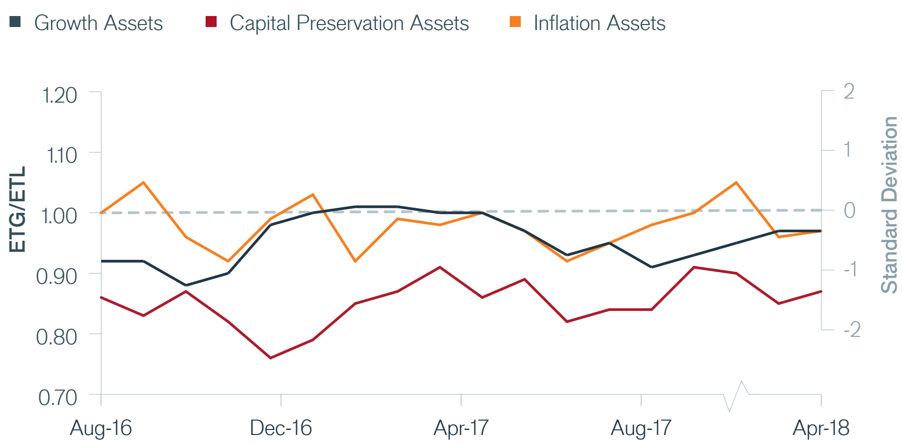
Not an Optimistic Picture, but Bright Spots are Identifiable

Options markets are not indicating the most optimistic picture, as our options-implied signals show all broad asset classes are unattractive, with equities as mildly unattractive and bonds as very unattractive. Despite some classes being just mildly unattractive, the lack of any meaningful appeal across all major asset classes cannot be ignored as it may point to a dangerous market environment where diversification is void and all assets may sell off in a correlated fashion. Given the severity of such an impact, it is of utmost importance that as investors we remain focused in managing such a risk.

A catalyst that could pressure all asset classes is a global rise in real rates stemming from inflationary pressures and stable, robust growth, which could prompt central banks to rein in monetary stimulus sooner than what markets are currently anticipating. As we have previously cautioned, real rates are the catalyst we must not ignore.

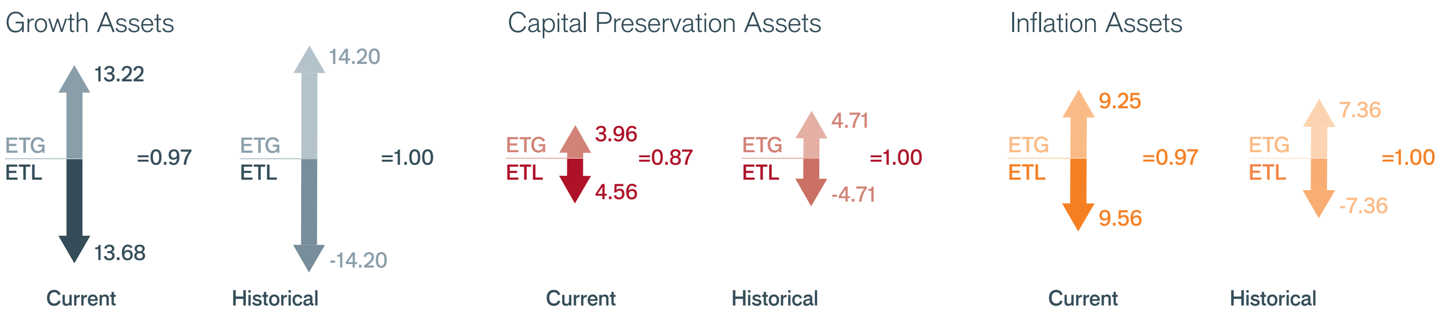
Recent Monthly Tail-Based Sharpe Ratios

(Expected Tail Gain* / Expected Tail Loss*)



Janus Henderson's Adaptive Multi-Asset Solutions Team arrives at its monthly outlook using options market prices to infer expected tail gains (ETG) and expected tail losses (ETL) for each asset class. The ratio of these two (ETG/ETL) provides a signal about the risk-adjusted attractiveness of the asset class. We think of that ratio as a "tail-based Sharpe ratio." The tables below summarize the tail-based Sharpe ratio of three broad asset class categories.

Current Tail-Based Sharpe Ratios (ETG/ETL)



Beginning in August 2016, the "tail-based Sharpe ratios" have been normalized to 1.00 to allow for easier comparison across the three macroeconomic asset categories.
*We define ETG and ETL as the 1-in-10 expected best and worst two-month return for an asset class.
Data was not calculated for all months.

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Within the bond and equity market environments, we see the U.S. as most attractive. In the bond markets, those regions where real rates are lowest, such as Europe and Japan, appear most susceptible to a sell-off, versus regions such as the U.S. where real rates are much higher. Substitution flows from these lower yielding regions to higher yielding regions are potentially one source of stress on lower yielding bonds.

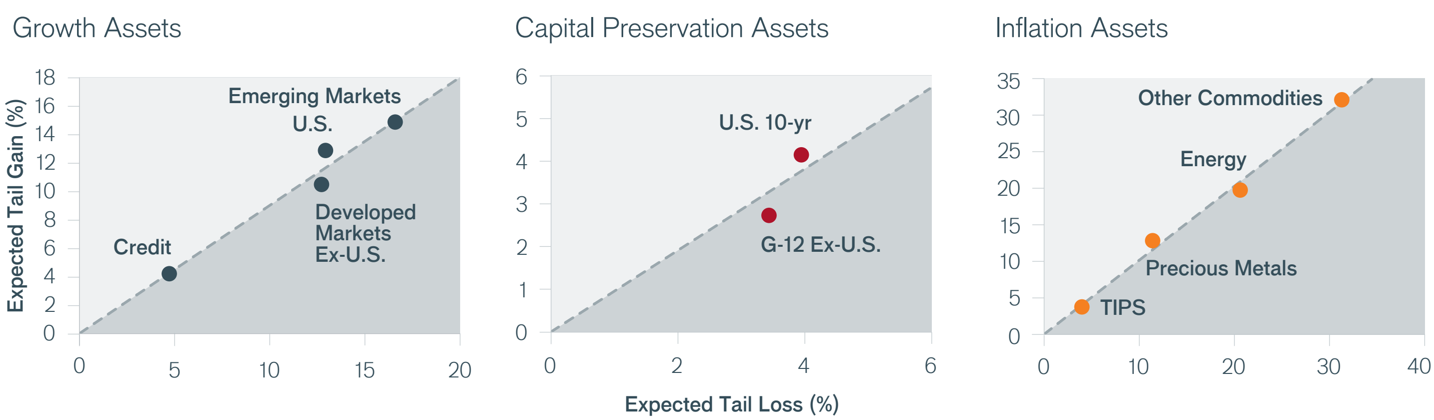
Options markets similarly suggest that the most attractive place to source equity exposure is in the U.S. This may be due to stimulative fiscal policy, which gives U.S. growth an additional source of support that other regions do not have. Despite the heightened noise plaguing American politics, the options market appears to be looking past this and identifies relative attractiveness of U.S. assets, whether it is the higher real rates offered in U.S. bonds or pro-growth impact of fiscal stimulus on equities.

In addition to our outlook on broad asset classes, Janus Henderson's Adaptive Multi-Asset Solutions Team relies on the options market to provide insights into specific equity, fixed income and commodity markets. The following caught our attention:

- **Growth Assets:** We see Canadian and U.S. equities as two of the more attractive global developed regions. Our signals also suggest that within emerging markets, Mexico is one of the more attractive areas. This indicates to us that the risk of the Trump administration rescinding NAFTA is quite low as a U.S. withdrawal from the trade pact would certainly put growth in these two countries at risk.
- **Bonds:** We see lower non-U.S. sovereign yields catching up to much higher U.S. government bond yields. This may be the start of the "great global bond convergence," as U.S. 10-year yields are more than 200 basis points above German 10-year Bunds.
- **Currency & Commodities:** Our signals continue to see a weaker U.S. dollar ahead. As a result, gold has climbed to attractive levels.

Tail-Based Sharpe Ratio

(Expected Tail Gain / Expected Tail Loss)



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