

# Tail Risk Report

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

As of 11/30/18

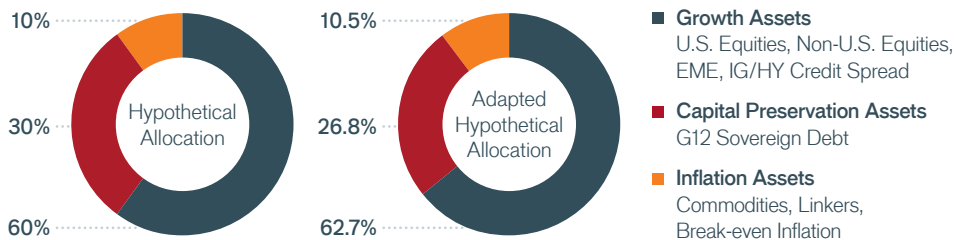
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## What will Move – the Fed’s Dot Plots or the Market?

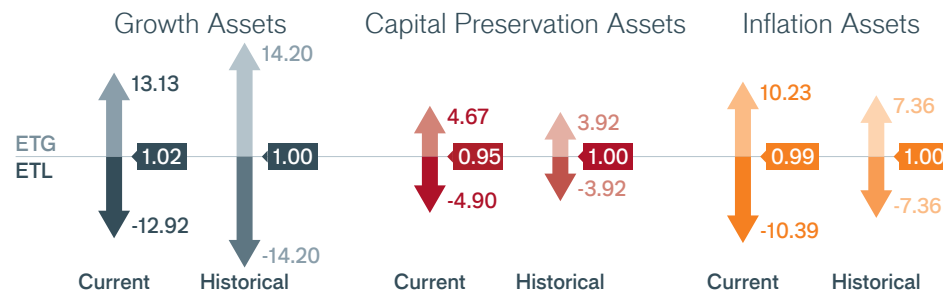
Federal Reserve (Fed) Chairman Jerome Powell’s sudden reassessment that overnight rates are “close to” rather than “a long way from” the neutral policy rate jolted bond markets, once again putting interest rate markets at the epicenter of uncertainty. The uncertainty lies in the future trajectory of rates as the gap between the Fed’s “dot plots” and what the market expects remains very wide, with the market projecting nearly three and a half fewer rate hikes through 2020 than the FOMC’s median projection. So will the policy rate move toward the hawkish dot plots or will the dovish market view of future rates prevail?

## Impact of Tail Risk Signals on Hypothetical Asset Allocation

Using proprietary technology, Janus Henderson’s Adaptive Multi-Asset Solutions Team derives tail risk signals from options market prices on three broad asset classes. Given our current estimates of tail risks, we illustrate how those signals would impact a 60/30/10 allocation.



## Current Tail-Based Sharpe Ratios (Expected Tail Loss/Expected Tail Gain\*)



**Ashwin Alankar, Ph.D.**  
Head of Global Asset Allocation | Portfolio Manager

We arrive at our 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 signals about the risk-adjusted attractiveness of each asset class. We view this ratio as a “Tail-Based Sharpe Ratio.” These tables summarize the current Tail-Based Sharpe Ratios of three broad asset classes.

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.

Our options signals suggest that the market will move more toward the hawkish trajectory of the dots rather than vice versa. Consequently, we believe interest rates are more likely to rise than to fall. Certainly, some recent macroeconomic prints are showing softness, but softness is quite different from a slowdown. Labor markets are strong, the unemployment rate is low and financial conditions are still accommodative. We believe these are among the reasons why the Fed will continue its gradual normalization of policy rates.

Since lending money overnight to a creditworthy counterparty should not really yield much more than inflation as the lender is not taking much – if any – risk, Mr. Powell arguably is quite correct in remarking that front-end rates – by being near the natural expected inflation level of 2.0% – are more or less “normalized.” But, lending money over much longer time horizons should yield a real return close to the long-term expected real GDP growth rate, which most peg within the range of 1.5% to 2.0% in a developed country. Unfortunately, that is not the case today and the cost of borrowing over longer horizons still remains relatively cheap, with the U.S. 10-year real rate sitting at 1.0%, well below even the low end of most economists’ forecast of the long-term normal real GDP growth rate for the U.S. Increasing interest rates at the long end, so that the price of money is fairly priced across all time horizons, is the second and the final step of policy normalization, and the one that we believe the Fed will pursue going forward via balance sheet reduction. This may well be the forward view the options market is currently pricing in.

As long as this tightening is carried out gradually and proactively to contain inflation rather than reactively to combat inflation, we believe recession risk is very low. This view is consistent with what the options market is pricing going forward: the expected tail loss to equities is nowhere near the -20% two-month drawdown level that often presages recessions.

We continue to view inflation risk as the greatest threat to the economy compared to other potential sources such as trade risk. With an inflation shock, central banks would lose the luxury of tightening gradually and will have to aggressively accelerate tightening in response to unexpected inflation that, more likely than not, would lead the price of money to trade expensive and stifle the real economy. For that reason, we continue to keep our eyes on real rates and inflation and, of course, options prices – all of which are good barometers of how close we are to a “tipping” point.

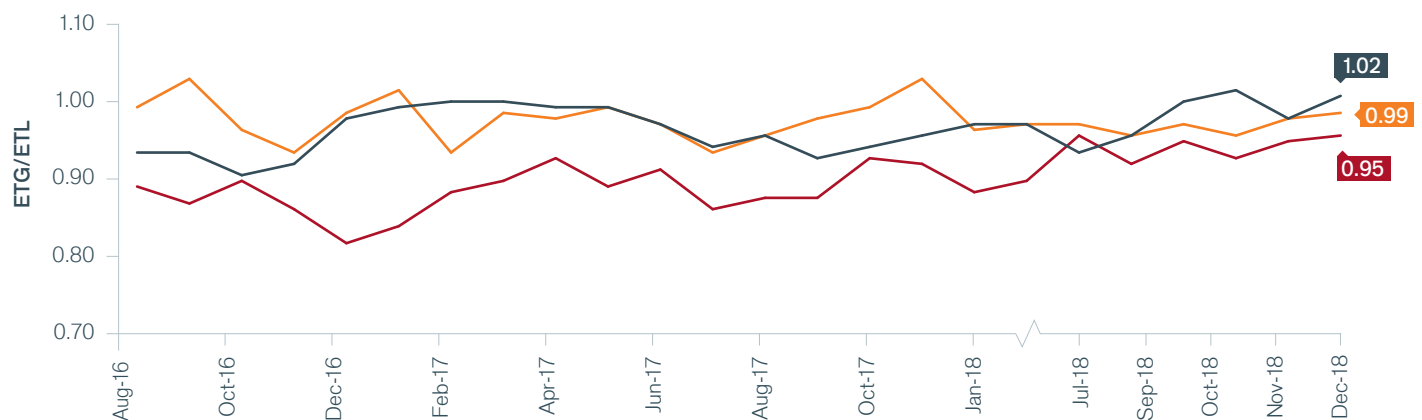
In addition to our outlook on broad asset classes, Janus Henderson’s Adaptive Multi-Asset Solutions Team relies on the options markets to provide insights into specific equity, fixed income and commodity markets. The following developments have recently caught our attention:

- **Growth:** The overall attractiveness of equities is sitting slightly above average levels, led by emerging market equities that are flashing a strong expected tail gain versus tail loss.
- **Capital Preservation:** Signals continue to point to a rising rate environment globally.
- **Inflation Assets:** The options market is indicating slight strength to the U.S. dollar. Natural gas looks particularly attractive ahead of upcoming colder than expected months, while crude oil does not.

## Historical Monthly Tail-Based Sharpe Ratios

(ETG/ETL)

■ Growth Assets ■ Capital Preservation Assets ■ Inflation Assets



Data was not calculated for all months.

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