

Tail Risk Report

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

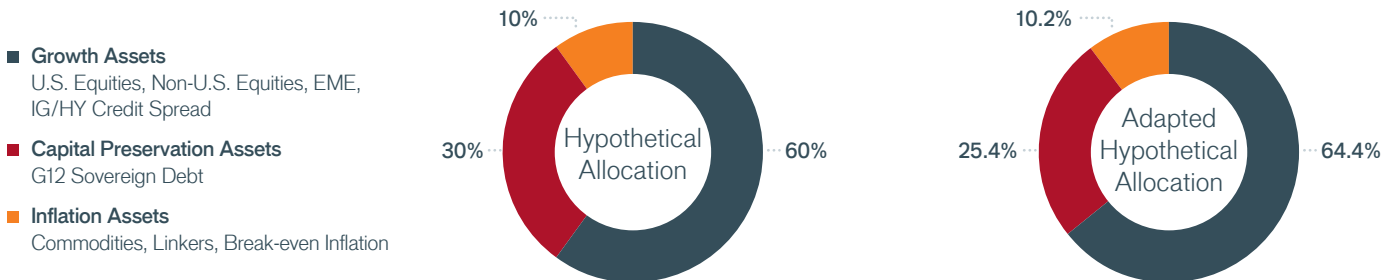
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Steady as you go ...

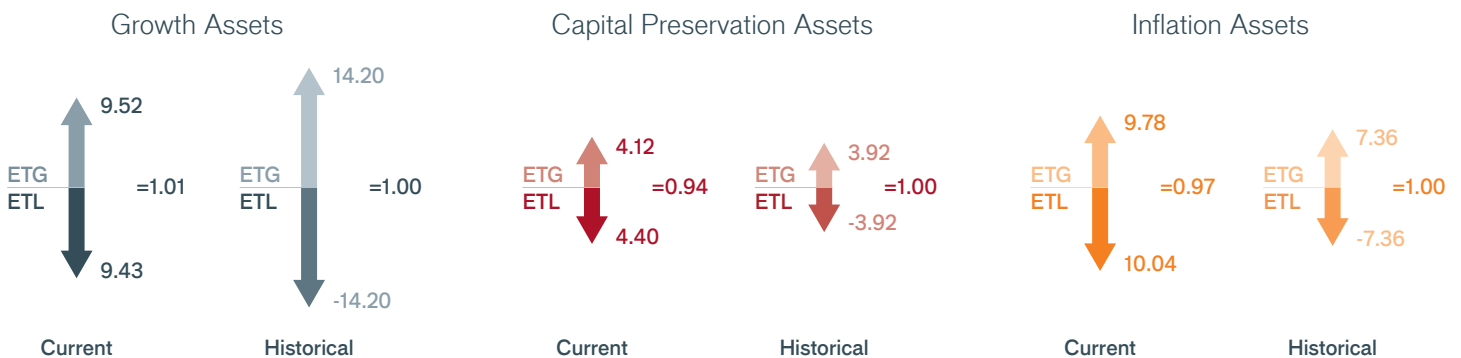
While the days of a steady and endless rise in assets may be behind us, we do not see any signs of the hibernating bear awakening. Our signals currently suggest equities in general are “steady as you go,” with levels of expected upside to downside consistent with the historical average levels. Not too hot and not too cold. We do see inflation-sensitive assets (e.g., commodities) sitting at an average level of attractiveness. As such, we should not give up hope on inflation, but rather be extra vigilant on the inflation front. Inflation, as we have remarked in previous months, is a risk factor that can awaken the bears.

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 (ETG*/ETL*)



Our 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 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 Ratio 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.

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Currently, we observe an interesting juxtaposition: Why are the options markets not showing any signs of a market correction, while measures, such as a near inverted yield curve, that has received a great deal of attention recently, suggest otherwise? We believe it all has to do with the absolute level of real rates. While it is true that prior to most recessions, the yield curve has inverted, what is also true is that real rates were very high, generally near 3%. And today we have a flat yield curve, but we do not have high real rates. Real rates are still very low, with the U.S. 10-year real rate sitting under 80 bps, German 10-year under -100 bps and Japanese 10-year under -30 bps. Monetary conditions are still very accommodative, and we would argue the level of the real rate matters to the real economy, not the slope of the term structure. We must not confuse correlation with causation.

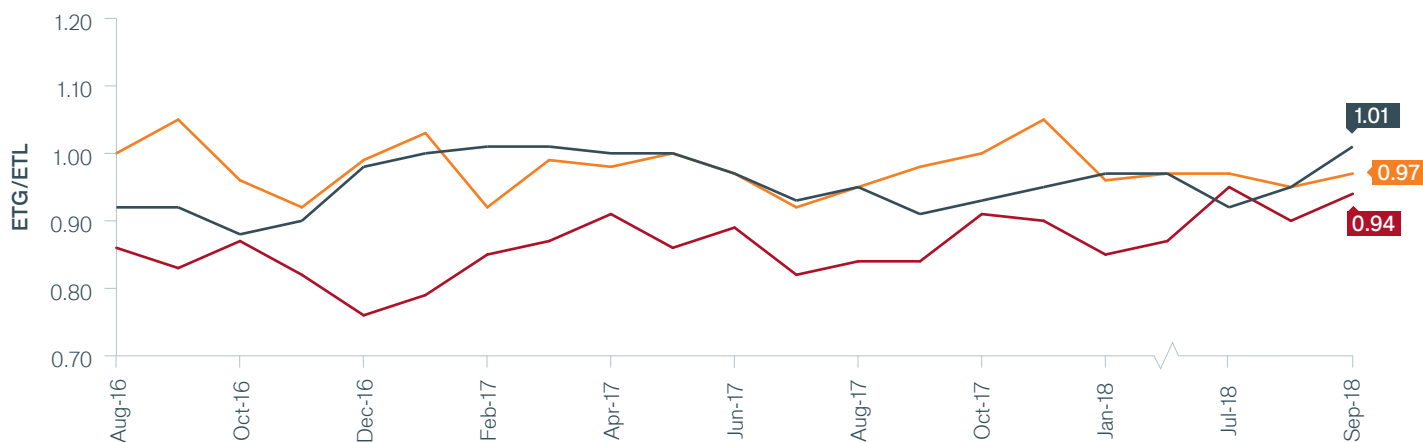
In addition to our outlook on broad asset classes, Janus Henderson's Adaptive Multi-Asset Solutions Team relies on the options market to provide insights into specific equity, fixed income and commodity markets. The following caught our attention:

- **Growth:** Within global equities, U.S. and emerging market equities continue to look the most attractive. We do not see signs of contagion among emerging market countries. China, Brazil and Mexican equities, for example, all show larger expected upside-to-downside ratios pointing to higher-than-average attractiveness. Further, expected downside risk for the emerging market countries (other than for Brazil) are not elevated relative to historical average levels.
- **Fixed Income:** U.S. and Australian treasuries offer the most attractive place to source duration relative to other developed sovereign markets.
- **Currency:** Our options-based signals point to continued USD strength.

Historical Monthly Tail-Based Sharpe Ratios

(Expected Tail Gain* / Expected Tail Loss*)

■ Growth Assets ■ Capital Preservation Assets ■ Inflation Assets



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