AEGON Asset Management

The US Treasury-Equity Correlation

Our Thoughts

August 2017

By Frank Rybinski, CFA, Director of Macro Strategy
D. Harris Kere, CFA, Investment Strategist

Will US Treasuries remain a viable portfolio hedge?

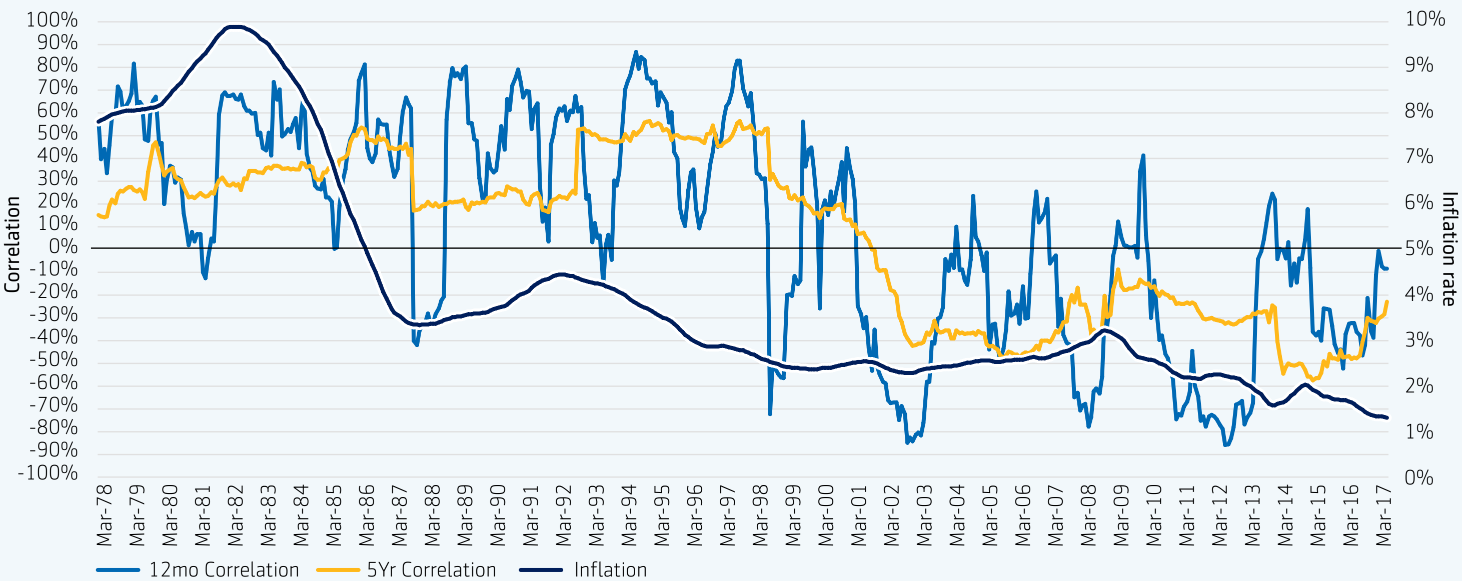
Aegon AM's investment rubric comprises a quadrant of four indicators: fundamentals, valuation, technicals and sentiment. In this note, we focus on the longer term macroeconomic drivers—the fundamentals—of asset class behavior, notably US Treasury yield and equity price co-movements, and the implications for asset allocation.

The expected co-movement (aka correlation) between US Treasuries and equities is well entrenched in modern portfolio theory literature. Asset allocators regularly use this statistical relationship to help manage risk. Market participants expect longer term bond returns should correlate negatively with equity returns. However, correlations can be unstable, and may be time-varying. Consequently, it is paramount to understand the underlying drivers of correlation regimes in general, and between US Treasuries and equities in particular.

Realized inflation levels and uncertainty around inflation forecasts tend to affect both the term premium and inflation expectations priced into bond yields. The decades-long decline in those factors has pressured bond yields lower, providing a long tailwind to bond prices. Structurally lower rates have also boosted profit margins, and lower term premia have pulled equity valuations higher. Meanwhile, the correlation between US Treasuries and equities has changed in material ways.

Exhibit 1 illustrates the relationship between trends in inflation and short and longer-term correlations between US Treasuries and equity returns. The pull of inflation levels on correlations can be readily observed. As inflation trended lower and inflation expectations were increasingly anchored, correlations between equity and US Treasury returns went from positive to negative. The correlation is strongly positive and modestly negative over the first 20-year period, but strongly negative and modestly positive in the subsequent period. The five-year trend suggests two different regimes can be observed: a positively correlated regime before 2001, and a negatively correlated regime since, wherein US Treasuries may now broadly serve as a hedge to equities.

Exhibit 1: Stock and Treasury Bond Return Correlation and Inflation - weekly data



Source(s): AAM US Macro Strategy, Bloomberg

As of May 2017

As inflation levels and inflation expectations ultimately augur the direction of rates, the yield level-dependent co-movement of changes in the 10-year yield and equity returns confirms the existence of the two regimes.

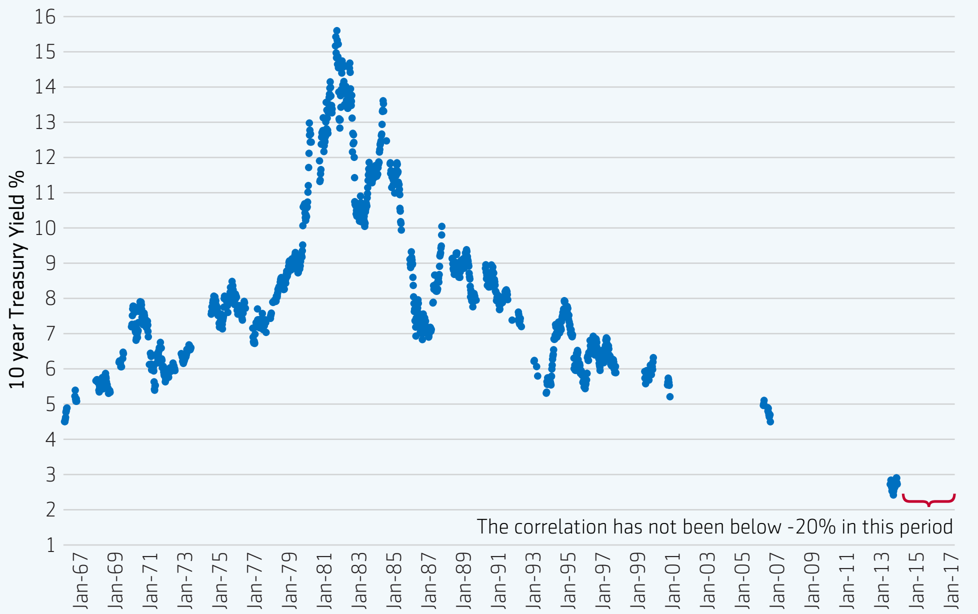
As changes in yield are inversely related to US Treasury bond returns, equities and bonds sell off in tandem at high yield levels, i.e. an increase in yields leads to negative returns for both US Treasuries and equities. At low yield levels, the correlation is inverse, i.e. an increase in yields leads to a negative return for US Treasuries and a positive one for equities.

Exhibit 2: Rolling 26-week correlation (weekly change in SPX and 10-year yield) vs. 10-year yield level

Source(s): AAM US Macro Strategy, Bloomberg As of June 2, 2017

Were yield levels to revert to and stay at higher levels, a return to the old regime is probable—one in which US Treasury yields broadly move directionally with equity prices, except for in times of market stress. But, how high must yields get for the correlation regime to change? Probably not as high as you might expect, and certainly not as high as in prior regime changes. The threshold has likely shifted lower, as persistently lower yield levels have increasingly given way to material reversals in the correlation between yield changes and equity returns, as illustrated in exhibit 3. Increases in yields are likelier now to lead to negative returns for both equities and US Treasuries at lower yield levels than the prevailing regime in much of the 80's and 90's.

Exhibit 3: 10-year yield when correlation between yield changes and equity returns is below -20% (rolling 26-week correlation)



Source(s): AAM US Macro Strategy, Bloomberg, BLS As of July 2017

Ultimately, the trend in the relationship between US Treasuries and equities, and the corresponding asset allocation decisions, will vary with trends in inflation and rates. As we have argued, lower trend inflation and rates are likely to persist absent sustained improvements in productivity. In that context, the demand should persist for both equities as a call option on cyclical growth, and for US Treasuries as a hedge against turbulent times.

Disclosures

The archived content contains information that is historical in nature and may be outdated. This material is provided for informational purposes only and should not be relied upon for investment decisions.

Aegon USA Investment Management, LLC (AUIM) is a U.S.-based SEC registered investment adviser and is also registered as a Commodity Trading Advisor (CTA) with the Commodity Futures Trading Commission (CFTC) and is a member of the National Futures Association (NFA). AUIM is a member company of Aegon Asset Management, the global investment management brand of the Aegon Group.

This material is to be used for institutional investors and not for any other purpose. The enclosed information has been developed internally and/or obtained from sources believed to be reliable. This material contains current opinions of the manager and such opinions are subject to change without notice. AUIM is under no obligation, expressed or implied, to update the material contained herein. This material contains general information only on investment matters; it should not be considered a comprehensive statement on any matter and should not be relied upon as such. If there is any conflict between the enclosed information and AUIM's Form ADV, the Form ADV controls. The information contained does not take into account any investor's investment objectives, particular needs, or financial situation. Nothing in this material constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to you. The value of any investment may fluctuate. Past performance is not indicative of future results.

This document contains "forward-looking statements" which are based on AUIM's beliefs, as well as on a number of assumptions concerning future events based on information currently available to AUIM. These statements involve certain risks, uncertainties and assumptions which are difficult to predict. Consequently, such statements cannot be guarantees of future performance and actual outcomes and returns may differ materially from statements set forth herein.

This material contains the current opinions of the authors and not necessarily those of AUIM and such opinions are subject to change without notice. This material is intended for illustrative and discussion purposes only. None of the information contained herein is intended to be an endorsement, or imply approval or disapproval of any political candidate or position, or to be a prediction of results by AUIM.

Recipient shall not distribute, publish, sell, license or otherwise create derivative works using any of the content of this report without the prior written consent of Aegon USA Investment Management, LLC, 4333 Edgewood Rd NE, Cedar Rapids, IA 52499.