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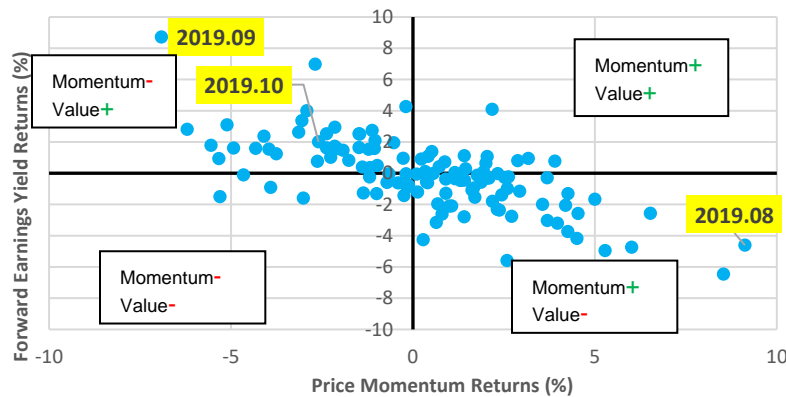
THREE OBSERVATIONS ON VALUE

Value and momentum factors experienced a major swing in August and September

Momentum and value (see factor descriptions in Appendix) returned 9.1% and -4.6%, respectively, in August and in stark contrast, -6.9% and 8.7% in September. Each month stands as the most extreme example of momentum vs. value outperformance in the last ten years (Exhibit 1).

The momentum-into-value rotation—value assets have shown a notable outperformance versus their growth peers since in the beginning of September—runs counter to the prior ten years of market history. The performance reversal of these largely cyclical stocks was a surprise, especially given momentum’s dominance in August.

Exhibit 1: Monthly net long-short returns of price momentum and forward earnings yield



*Forward Earnings Yield (e/p) is defined as time-weighted forward 12-month earnings per share divided by price. Price Momentum is defined as 1-month lagged 11-month stock returns. Top 20% minus Bottom 20%; Sector Neutral; Square Root of Market Value Weighted; Russell 1000.

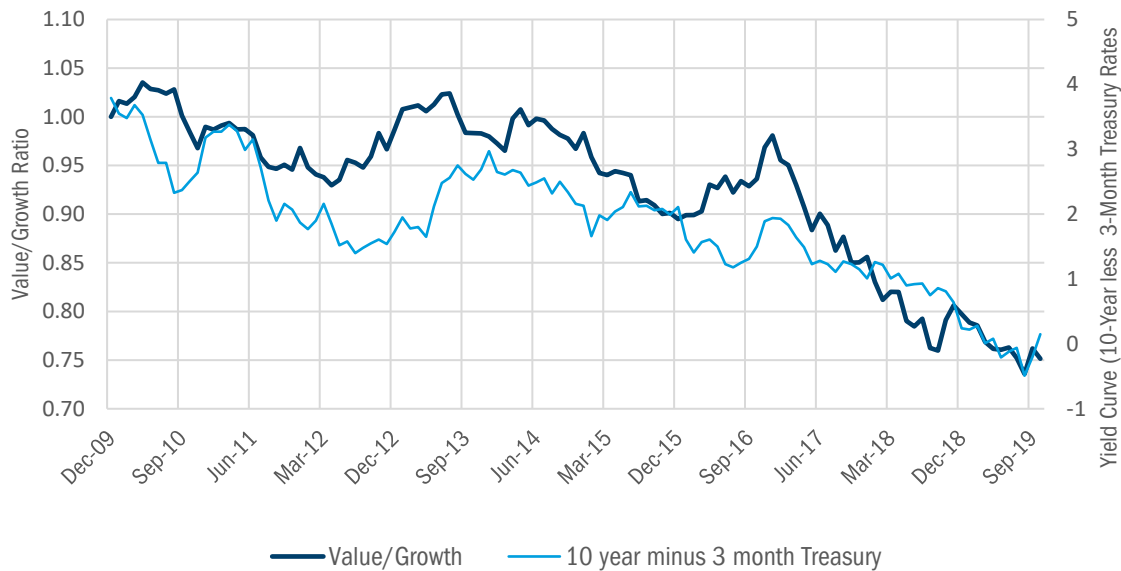
Source: FTSE Russell, Columbia Threadneedle Investments; through October 31, 2019

In August, 30-year Treasury yields reached their lowest level ever, as investors were confronted with negative headlines and an inverted yield curve. The initial reversal of momentum and value-tilted stocks occurred over the first two weeks of September as Treasury yields rose and trade rhetoric cooled.

In recent years, value stocks have tracked the yield curve much more closely.

The August-September rotation encapsulated the impact of macroeconomic factors on investor behavior. Investors had become far too cautious, abandoning cheap, cyclical, i.e. undervalued, stocks. When subsequent data turned out not quite as bad as feared—a sentiment which carried through October—the trade reversed, as did the direction of bond yields. Once it started to turn, the rotation occurred in an extremely rapid and dramatic fashion.

Exhibit 2: Russell 1000 Value/Russell 1000 Growth Relative Performance vs. Yield Curve
December 2009-October 2019



*Yield curve is treated as 10-Year Treasury - 3-Month T-Bill yield spread. Factor return spread was calculated within the Russell 1000 universe.

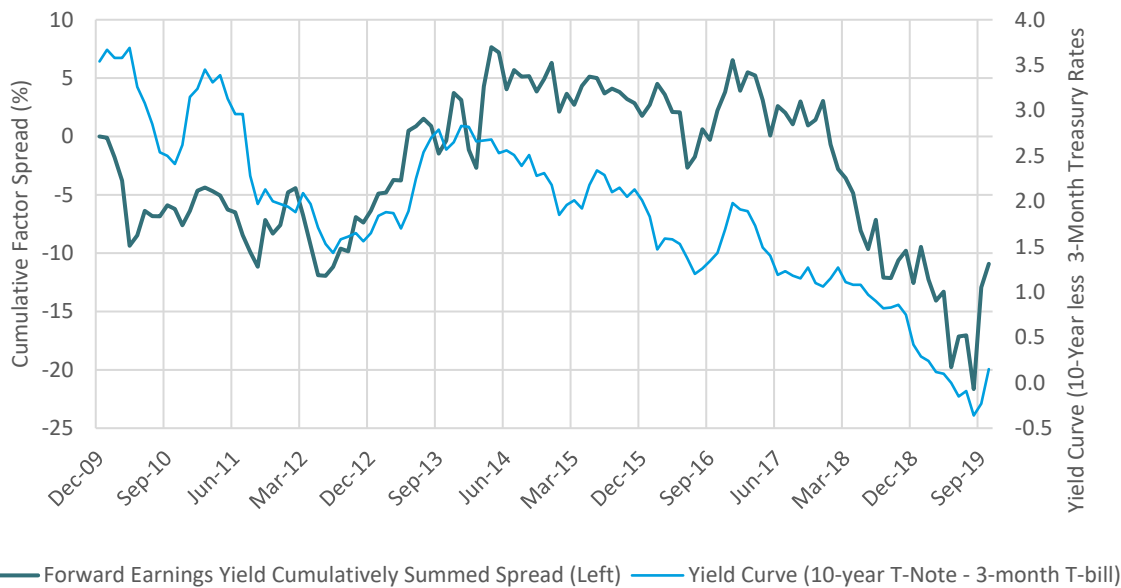
Source: Bloomberg, Columbia Threadneedle Investments; through October 31, 2019

As indicated in Exhibit 2 above, the recent resurgence of value followed the positive separation of the 3-month/10-year Treasury yield spread. Certainly, the yield curve has widened in prior periods, but the value/growth spread did not react in the same way in these instances. The flat or inverted yield curve spread this year has put added significance on yield increases, whose effects are amplified in a low-rate environment.

Many theorize value factors respond to yields, or that yields reflect value. We believe that, rather than driving each other, value and yields are responding to the same underlying economic catalysts.

We know yield movements are a risk barometer. As the direction of the economy becomes more uncertain, investors tend to become more risk-averse and will seek U.S. Treasuries to hedge equity risk exposure, driving yields on the long end down. Yields and value both responded to improved economic expectations in September.

Exhibit 3: Forward Earnings Yield Cumulative Quintile Spreads vs. Yield Curve

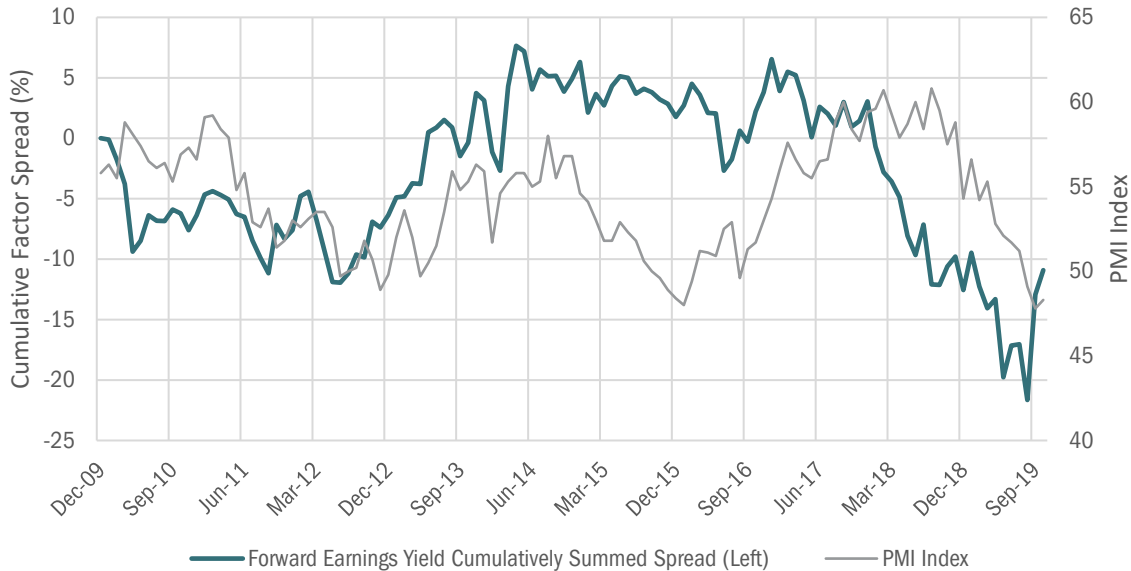


*Yield curve is treated as 10-Year T-Note less 3-Month T-Bill yield spread. Factor return spread was calculated within the Russell 1000 universe.

Source: Bloomberg; Columbia Threadneedle Investments

A direct measure of the economy is the Institute for Supply Management's Purchasing Managers Manufacturing Index (PMI). The PMI manufacturing data tracks yield curve movements and reinforces the argument that value will respond positively to improving economic conditions. Using forward earnings yield as a proxy for value we can see an established relationship between the strength of the U.S. economy and value factor's performance (Exhibit 4).

Exhibit 4: Forward Earnings Yield Cumulative Quintile Spreads vs. PMI Manufacturing Index
December 1990-October 2019



Factor return spread was calculated within the Russell1000 universe.
Source: Bloomberg; Columbia Threadneedle Investments

The revival of value that occurred in the first two weeks of September was an immediate response to improving sentiment surrounding the American economy. Reduced trade tensions and improving economic data should underpin value's long-term efficacy and bolster the argument that value will follow the path of improved economic certainty. We expect, at the same time, rates will respond to various measures of economic productivity. Whereas many theorize that value responds to yields, or that yields reflect value, we argue that value and yields are reacting, somewhat independently, to the same underlying economic dynamics. We can observe and respond to these dynamics, but they are difficult to anticipate. For many years the market environment has been defined by a growth orientation and low rate conditions, where value was hard to extract. Even if those conditions continue their reversal, exogenous market factors continue to weigh on the potency of value factors and reinforce the importance of style diversification.

APPENDIX

Factor Descriptions

Name	Description
Price Momentum	Price Momentum is defined as 1-month lagged 11-month stock returns. Top 20% minus Bottom 20%; Sector Neutral; Square Root of Market Value Weighted; Russell 1000.
Forward Earnings Yield (e/p) Earnings to Price	Time-weighted forward 12-month earnings per share divided by price; Russell 1000.

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