

Factor Views

Themes from the quarterly Quantitative Beta Research Summit

3Q 2019

IN BRIEF

- Factor performance was negative, on balance, over a quarter marked by slowing economic growth, trade tensions and dovish central bank rhetoric.
- Equity factors were led by momentum as investors resumed their chase for growth in a low rate environment.
- Event-driven factors were mixed, with merger arbitrage continuing to perform well while other factors gave back gains from earlier in the year.
- Macro factors were challenged by whipsawing commodity markets.
- We believe in diversifying across a broad range of compensated factors while minimizing exposure to uncompensated risks, and continue to find opportunities across markets.

OVERVIEW

Risk assets extended their gains in the second quarter despite subtrend economic growth, ongoing trade tensions and declining earnings forecasts as markets increasingly priced in expectations of monetary accommodation. While this backdrop supported the equity momentum factor, other equity and event-driven factors that we favor were left behind as investors generally chased mega cap growth stocks and stretched multiples on expensive names, paying little heed to underlying fundamentals (**EXHIBIT 1**). Fixed income yields fell precipitously over the quarter amid dovish central bank posturing and mixed data prints, which supported fixed income momentum and carry factors. However, whipsawing commodity markets proved challenging for macro factors more broadly. As we noted last quarter, major economies may remain in late-cycle territory for some time to come and prolong current market trends. However, we see valuations for certain factors reaching extreme levels and expect eventual reversals.

AUTHORS



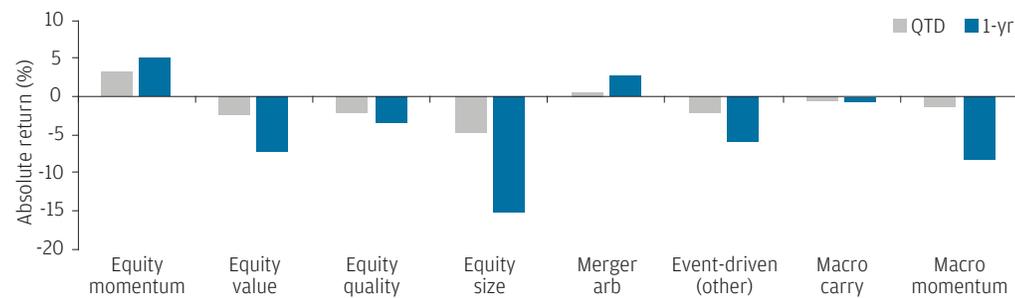
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Factors generally suffered over the quarter, with the exception of equity momentum

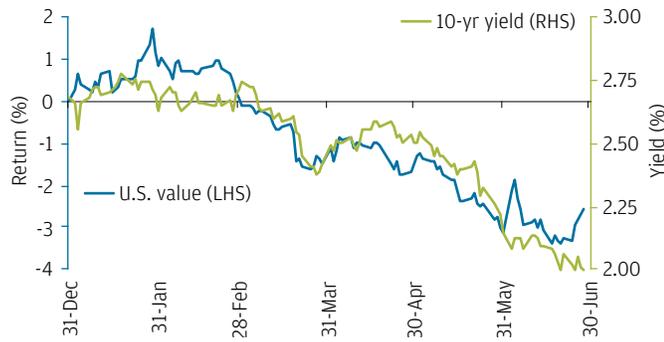
EXHIBIT 1: QUANTITATIVE BETA STRATEGIES LONG/SHORT FACTOR RETURNS



Source: J.P. Morgan Asset Management; data as of June 30, 2019. Note: Factors presented are long/short in nature. Equity factors represented as 100% long notional exposure, macro factors as aggregation of 5% vol subcomponents. Valuation spread is a z-score between the median P/E ratio of top-quartile stocks and bottom-quartile stocks as ranked by the value factor.

The value factor continued to fall alongside yields

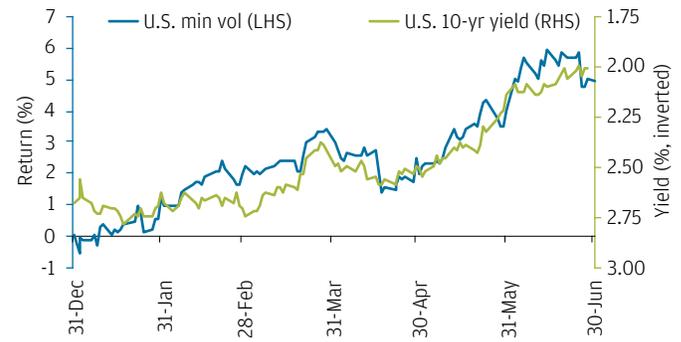
EXHIBIT 2: U.S. VALUE VS. 10-YEAR YIELD



Source: Factset, J.P. Morgan Asset Management; data as of June 30, 2019.

Minimum volatility has risen as yields have declined

EXHIBIT 3: U.S. MIN VOL VS. 10-YEAR YIELD



Source: Factset, J.P. Morgan Asset Management; data as of June 30, 2019.

FACTORS IN FOCUS

Equity factors: Momentum, minimum volatility and not much else

The equity momentum factor bounced back in the second quarter, with gains across U.S. and European markets, while value and size continued to underperform across the globe. After a strong start to the year, value continued to fall alongside yields as investors favored higher growth, albeit more expensive, stocks (EXHIBIT 2). As discussed last quarter, a relationship between the value factor and interest rates appears to have formed following the global financial crisis (GFC), with a flatter yield curve statistically linked to weaker factor performance. While this relationship is but one driver of the value factor’s performance, it makes intuitive sense given the higher portion of expensive/growth stock value that is driven by future cash flows and the rise in corporate leverage as companies borrow to fuel future growth while rates remain near historical lows. We are observing a similar, albeit opposite, linkage between the minimum volatility component of our quality factor and interest rates. Here a statistically significant correlation emerged post-GFC such that lower rates have been associated with stronger performance (EXHIBIT 3). Over this period, minimum volatility stocks have generally outperformed the broader quality factor and investors have seemingly set aside concerns of rising corporate leverage in pursuit of performance.

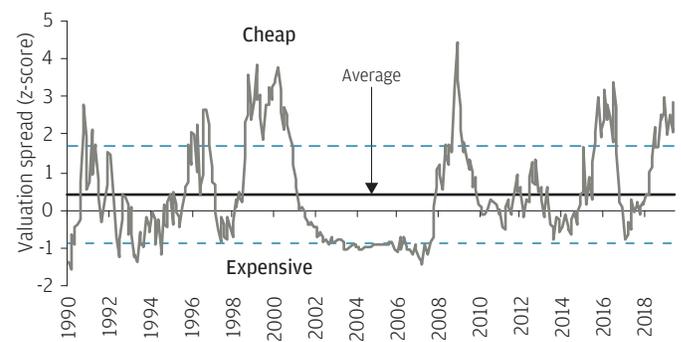
Looking ahead, we are most bullish about the prospects for the value factor—which on a historical basis neared 3 standard deviations cheap by the end of the quarter (EXHIBIT 4). While lower interest rates and an extension of the business cycle have presented headwinds for the value factor, cheap valuations, relatively lower debt maturities for value companies on

the horizon and an already visible downside in company fundamentals may all serve as catalysts for the factor’s rebound. In addition, with the market having already priced in two to three policy rate cuts by the Federal Reserve this year, there is less room for monetary policy to deliver a dovish surprise and greater potential for the yield curve to steepen.

We are also cautious about the prospects for minimum volatility, at least relative to recent performance. As we’ve noted, minimum volatility has outperformed broad definitions of the quality factor in recent periods; however, on the back of a wave of investor flows, minimum volatility stocks are now more expensive than their higher volatility peers, which is counter to long-term history and reduces our return expectations for the factor. (In fact, prior to the financial crisis, minimum volatility stocks were richer than their counterparts only once—in January 1990.)

On a historical basis, the value factor is nearly 3 standard deviations cheap

EXHIBIT 4: VALUE FACTOR VALUATION SPREAD (GLOBAL)



Source: J.P. Morgan Asset Management; data as of June 30, 2019. Note: Valuation spread is a z-score between the median P/E ratio of top-quartile stocks and bottom-quartile stocks as ranked by the value factor.

Event-driven factors gave back gains from earlier in the year

Event-driven factors broadly underperformed during the second quarter, reversing gains from earlier in 2019. The share buybacks factor had benefited from a significant rise in buyback activity since the passage of U.S. tax reform in December 2017. But it suffered in Q2, in May in particular, as a range of names were afflicted by trade tensions and earnings misses. The index arbitrage factor also detracted over the quarter, experiencing negative returns in the seasonally active month of June, while the spinoffs factor gave back gains throughout the quarter. Nevertheless, and despite a spike in volatility in May, the merger arbitrage factor continued to earn a healthy carry and attractive risk-adjusted returns.

We maintain a positive outlook for event-driven factors, believing that the rise in overall corporate activity levels supports the prospects for performance going forward. Further, merger arbitrage spreads¹ remain healthy, particularly in the context of a high proportion of deals being characterized as friendly in nature, with such deals offering higher odds of completion than unfriendly deals and thus better prospects of earning investor returns.

¹ The difference between the target company stock price and the announced acquisition price

Macro factors hamstrung by whipsawing commodity markets

Carry and momentum factors were negative over the quarter in aggregate; however, the detraction for each was squarely rooted in commodity markets. Commodity momentum and commodity carry were both down sharply in May as several markets reversed and overwhelmed gains in other asset classes. Corn rallied over 30% as heavy rain in the Midwest/Plains regions led to record delays in planting, oil fell over 20% on waning demand, and zinc and live cattle each fell nearly 20% on rising inventories and production. Outside the commodity space, carry and momentum factors were positive as equities and fixed income rallied in concert over the quarter and converging spreads benefited fixed income carry.

Unfortunately, the spread between high yielding and low yielding currencies remains below its long-term average, particularly for G10 currencies, as does the difference in term premium across G10 government bonds. This suggests a diminished potential to capture carry in those markets going forward. Among momentum factors, dispersion in price moves across currencies and commodities is also below average, although the number of significantly trending levels remains high, with fixed income and equity markets trending positively across the globe while commodity markets are trending in a negative direction.

CONCLUDING REMARKS

Markets that were by and large dominated by monetary policy and trade tensions created a tough environment for the factors that we favor. Looking ahead, we are seeing above-average opportunity sets for a number of factors; as always, we believe in diversifying across a broad range of compensated factors while minimizing exposure to uncompensated risks.

FACTOR OPPORTUNITY SET

The table below summarizes our outlook for each of the factors accessed by the Quantitative Beta Strategies platform. It does not constitute a recommendation but rather indicates our estimate of the attractiveness of factors in the current market environment.

FACTOR VIEWS

VS. LAST QUARTER: ▲ Upgrade ▼ Downgrade – No change



| | | Rationale | |
|--------------|------------|-----------|---|
| Equity | Momentum | ▼ | Negative on valuation, neutral on dispersion |
| | Valuation | ▲ | Attractive on valuation, attractive on dispersion |
| | Quality | ▲ | Neutral on valuation (increase from last quarter), neutral on dispersion |
| | Size | ▲ | Attractive on valuation |
| Event-driven | Merger arb | ▲ | Attractive on deal premia, attractive on % of friendly deals, negative on activity level |
| | Other* | ▲ | Attractive on activity level |
| Macro | Carry | ▼ | Neutral on FX spreads, negative on fixed income spread, neutral on commodity spread (downgrade from last quarter) |
| | Momentum | ▼ | Negative on FX and commodity price dispersion, attractive on significant price trends |

Source: J.P. Morgan Asset Management; for illustrative purposes only.

*Other: Conglomerate discount arbitrage, share repurchases, equity index arbitrage, post-reorganization equities and activism.

Our framework for evaluating factor outlooks is centered on the concepts of dispersion, valuation and the opportunity for diversification. For equity factors, we measure dispersion and valuation spreads between top-quartile and bottom-quartile stocks on a market, region and sector-neutral basis. For event-driven factors, we measure implied carry and the level of corporate activity as indicative of the ability to minimize idiosyncratic stock risk. For macro factors, we measure the dispersion or spread between top-ranked and bottom-ranked markets, as well as the number of significantly trending markets.

GLOSSARY

- **Equity momentum:** long/short global developed stocks based on price change and earnings revisions; sector and region neutral
- **Equity value:** long/short global developed stocks based on book-to-price, earnings yield, dividend yield, cash flow yield; sector and region neutral
- **Equity quality:** long/short global developed stocks based on financial risk, profitability and earnings quality; sector and region neutral
- **Equity size:** long/short global developed stocks based on market capitalization; sector and region neutral
- **Merger arb:** long target company and short acquirer (when offer involves stock component) in announced merger deals across global developed markets
- **Event-driven (other):** conglomerate discount arbitrage, share repurchases, equity index arbitrage, post-reorganization equities and shareholder activism
- **Macro carry:** FX G10 carry, FX EM carry, fixed income term premium, fixed income real yield, commodity carry
- **Macro momentum:** FX cross-sectional momentum, commodity cross-sectional momentum and time-series momentum across equity, fixed income and commodity markets

QUANTITATIVE RESEARCH FOCUSED ON INNOVATION

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- Deploy the talents of an investment team dedicated to quantitative research and portfolio construction.
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