

# INVESTCORP



## INVESTCORP ENVIRONMENT REPORT

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4Q 2019



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|                             |                                                                  |
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## TABLE OF CONTENTS

|                                                                         | Page |
|-------------------------------------------------------------------------|------|
| <b>Section 1:</b> Overview                                              | 1    |
| <b>Section 2:</b> Global Macro Environment and Traditional Beta Markets | 2    |
| <b>Section 3:</b> Alternative Risk Premia                               | 15   |
| <b>Section 4:</b> Hedge Funds                                           | 24   |
| <b>Section 5:</b> U.S. and European Broadly Syndicated Leveraged Loans  | 54   |







## OVERVIEW

We are delighted to introduce the 4Q 2019 edition of the Investcorp Environment Report, where we share selected insights from our proprietary research and internal models. As noted previously, our investment framework combines “cycle-aware” analyses of the macroeconomic drivers of traditional and alternative risk premia with more traditional valuation, technical and flow-driven investment approaches. We also model the cyclical outlook for alpha generation for each major hedge fund strategy. Our report begins in Section II with an overview of the major themes in the global macroeconomic environment: we evaluate where we are in the business cycle and draw out the implications for traditional beta markets.

### Global Macro Environment

Global growth momentum stabilized in recent weeks, thanks to supportive monetary policies and fading geopolitical headwinds – notably on the trade front. Still, the growth outlook appears mixed with continued weakness in the manufacturing sector for example. The inflation outlook remains relatively benign despite greater evidence of tighter labor markets and lower output gaps.

Still, much of the uncertainty that crippled markets last year has not disappeared. The trade issues have not been settled yet and we doubt any resolution would fully alleviate the risk premium as enforcement questions would continue to cloud investments decisions longer-term. And the impact

of stimulative monetary & fiscal policies is also subject to potential lags and/or lower multiplier effect than currently discounted by markets.

In that environment, we opt for patience and prudence. This translates into lower risk budgets, greater appetite for liquidity, positive carry and a balance between upside capture and downside protection.

### Alternative Risk Premia

In Section III, we discuss the cyclical outlook for alternative risk premia. In cash equities, we retain our overweight in value as signs emerge of a yield curve steepening, extreme valuations and positioning signals. In Fixed Income, we are staying underweight in Rates Carry and Value strategies but prefer an allocation to Front-Rate-Bias strategies in Emerging Markets. In credit, we also opt for Emerging Markets hard currency debt, on an absolute and relative basis – against high-yield corporate debt. Our constructive stance on emerging markets is also expressed in foreign exchange with a preference for carry. We stay constructive on mean reversion as the strategy should be in a strong position to monetize higher realized volatility in foreign exchange.

### Hedge Funds

In Section IV, we synthesize our perspectives on traditional and alternative risk premia into forward-looking views for major hedge fund

strategies. We stay underweight beta-heavy strategies as we see limited tailwinds from equity markets going forward. We downgrade our outlook for Convertible Arbitrage on valuation headwinds.

Finally, we remain constructive on the broad Global Macro opportunity set, directional and relative value players. Volatility arbitrage could also benefit from a higher volatility environment with strong regional and asset class dispersion offering attractive relative value trades.

### U.S. and European Broadly Syndicated Leveraged Loans

In this section, our credit teams across the Atlantic share insights over recent performance drivers for the asset class and their outlook for the coming quarters.

## GLOBAL MACRO ENVIRONMENT AND TRADITIONAL BETA MARKETS

| Strategy         | Negative | Neutral | Positive | Comments                                                                                                                                                                                                                                           |
|------------------|----------|---------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Equity</b>    |          |         |          | Underweight exposure to global equities on decelerating earnings, demanding valuations and stretched expectations of greater monetary easing while macro remains weak                                                                              |
| US               |          |         |          | US, a growth play with allocation to Tech. Poor earnings momentum and elevated valuations leave little room for error. Positioning can continue to fuel upside, if “FOMO” behavior re-appears but we prefer to take profit and re-build dry powder |
| Euro area        |          |         |          | A value play, but with limited catalysts ahead and growing risks of falling in the “secular stagnation” trap. Risks of disorderly Brexit and autos tariffs still concerning medium-term. Needs Chinese growth re-acceleration to stand out.        |
| Japan            |          |         |          | Another value play, with lower tail risks attached. Monetary policy remains supportive, mind the impact of the consumption tax hike and wait for earnings turnaround                                                                               |
| Emerging Markets |          |         |          | Play on a successful Chinese stimulus and potential move lower in the dollar, supporting the global liquidity environment                                                                                                                          |
| <b>Duration</b>  |          |         |          |                                                                                                                                                                                                                                                    |
| US               |          |         |          | Negative Equity/Rates correlation re-asserting itself as inflation fears fade and growth concerns take center stage. Rates have disconnected (a bit) from equities, pricing in a worse growth outcome, for now                                     |
| Europe           |          |         |          | Limited value for diversification at current levels, a pure carry play with negative asymmetry if growth were to surprise to the upside                                                                                                            |
| Japan            |          |         |          | Limited value for diversification at current levels, a pure carry play with negative asymmetry if growth were to surprise to the upside                                                                                                            |
| <b>Credit</b>    |          |         |          |                                                                                                                                                                                                                                                    |
| Dev. High Yield  |          |         |          | Spreads are widening on typical late cycle behavior and concerns over elevated corporate leverage – we stay underweight but would consider trading the range                                                                                       |
| EM               |          |         |          | Attractive carry and better valuations from an historical perspective.                                                                                                                                                                             |
| <b>FX</b>        |          |         |          |                                                                                                                                                                                                                                                    |
| USD              |          |         |          | Challenged longer-term on growing twin deficits and elevated valuations. Decent relative economic momentum a plus and supported by high interest rate diff. vs G3                                                                                  |
| EUR              |          |         |          | Near-term outlook neutral on poor growth momentum but value and flow dynamics could be supportive longer-term                                                                                                                                      |
| JPY              |          |         |          | Narrowing interest rate differential and strong valuation make the yen an attractive hedge in diversified multi-asset portfolios                                                                                                                   |

## GLOBAL MACRO AND MARKETS OUTLOOK

### Global Macro

We begin our discussion of the outlook ahead by detailing our perspectives on the global economy's current momentum with respect to growth and inflation dynamics. Absent major contra-cyclical forces, we find that momentum generally offers the best forecast of the near-term evolution of the economic system. We then study the nature and strength of identified and potential negative feedback loops, the catalysts and tipping points lying ahead that could meaningfully alter the economic system direction of travel. Next, we evaluate flow and positioning signals to determine what is priced in and to identify pockets of entrenched investor expectations. Finally, we conclude with an update of our asset allocation playbook.

### Macroeconomic Fundamentals

#### Gauging Global Economic Momentum

Our approach to macro analysis originates with an assessment of global economic momentum along two primary vectors: growth and inflation. We seek to understand direction and speed of travel across a large set of macro variables in an effort to identify the path of least resistance for the economic system. After that, we consider contracyclical forces and their potential tipping points, any factor that could bring about a change in regime.

Nowcast models indicate that the global economy is growing at a 2.7% rate, as of September 2019. Offering a real-time read on economic conditions, these measures are derived from standard econometric models incorporating a broad array of macroeconomic data. As the following chart shows, the decelerating trend since 2018 began has slowed growth to the point where it is now dangerously

close to recessionary levels – in global terms, this generally refers to a rate below 2.5%.

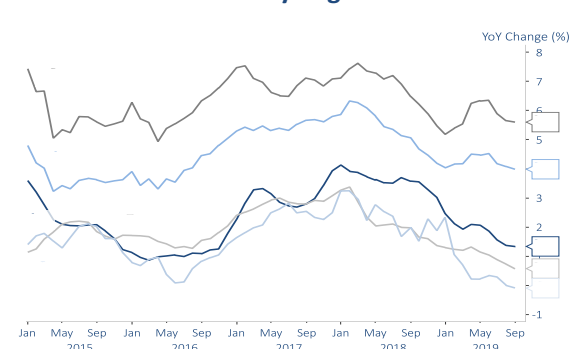
#### Global GDP Aggregate Nowcast



Source: Goldman Sachs, Morgan Stanley, Investcorp, Macrobond

The slowdown has unfolded across a range of geographies; for now, at least, we see few signs of stabilization. In terms of specifics, the Japanese nowcast model has turned negative, signaling a decline of 0.1%, and while US and European counterparts remain in the black, the downside still appears to be the path of least resistance, as the following chart suggests.

#### GDP Growth Nowcast by Region



Source: Investcorp

Another measure tells a similar story. As can be seen in the chart below, our diffusion index of OECD leading economic indicators has recently turned lower, marking an abrupt reversal of the upside momentum in developed and emerging economies since the end of December. Designed to measure the general tendency of leading indicators across a wide swathe of countries, the measure has now fallen back even further from 50. This indicates that most are still signaling economic weakness ahead, casting doubt on the resiliency of global growth dynamics.

#### OECD Leading Indicators Diffusion Index

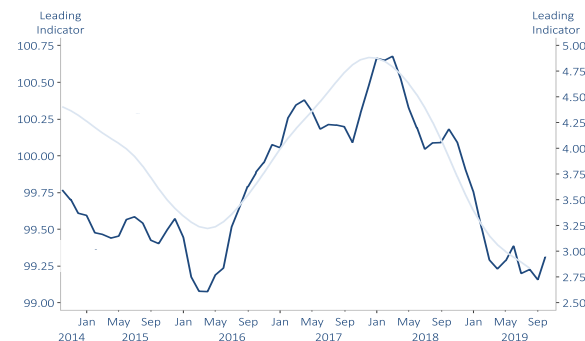


Source: OECD, Investcorp, Macrobond

That said, aggregate measures paint a somewhat more benign picture. As the following chart illustrates, global leading economic indicators from both the OECD and the sell-side have shown signs of stabilization in recent months. Following the sharp slide in last year's second half, downside momentum has been losing steam, signaling a shallower contraction and heightened prospects for a bottom in economic activity.

## GLOBAL MACRO ENVIRONMENT AND TRADITIONAL BETA MARKETS

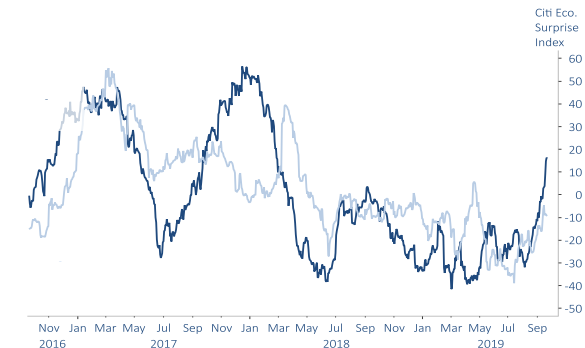
### Global Economic Leading Indicators



Source: Goldman Sachs, OECD, Investcorp, Macrobond

Macroeconomic surprise indices also offer some reason for optimism. As shown below, economic reports have been outpacing forecasts in recent times, suggesting improving fortunes, though we are hesitant to read too much into this alone. Historically, economic surprise indices have tended to be mean-reverting, with positive surprises today often paving the way for negative surprises tomorrow. Yes, growth might not be as weak as economists have been expecting, but it is worth keeping in mind that we have yet to see convincing evidence of an upside reacceleration.

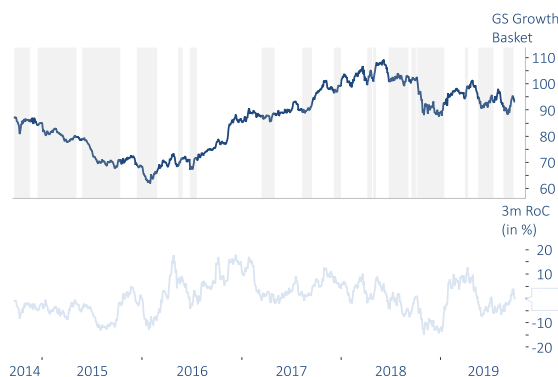
### Economic Surprise Indicators



Source: Investcorp

Whether or not the low is in, hints of a turnabout may well be one reason why assets tied to growth have picked up recently. As can be seen in the chart below, the three-month rate of change of a gauge based on the performance of a basket of cyclical assets across foreign exchange, commodities and equity markets has rebounded toward neutral after dropping in August. Meanwhile, three-month crossover momentum is no longer negative (i.e., not marked as gray). Combined with diminished hostilities on the trade front, hints that the worst may be over for the economy have likely been the impetus for renewed investor interest.

### Global Growth Market Proxy



Source: Goldman Sachs, Investcorp, Macrobond

Regardless, the consumer sector remains a major source of resilience for the economy, bolstered by continued optimism at the grass roots level. As shown in the following chart, consumer sentiment has remained well behaved despite growing stress in manufacturing and heightened political and economic policy uncertainty. For the most part, robust real wage growth, decent household balance sheet strength, and low unemployment have more than offset the negatives.

### Investcorp Global Consumer Confidence Indicator



Source: Investcorp, Macrobond

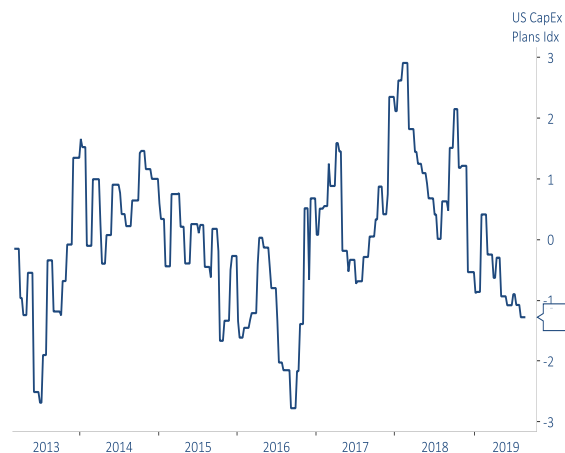
Still, the question of whether the weakness in manufacturing will eventually spill over into other parts of the economy remains a concern. Conditions in the sector have been dismal, with few signs of improvement thus far. Making matters worse, an escalation in policy uncertainty, with US-China trade tensions at the forefront, continues to weigh heavily on corporate sentiment, detailed in the first chart below. This has diminished appetites for increased capital spending; as the second chart shows, the US Corporate CapEx Plans Index has recently fallen to three-year lows.

### Investcorp Global Manufacturing Confidence Indicator



Source: Investcorp, Macrobond

### Investcorp US Corporate CapEx Plans Index

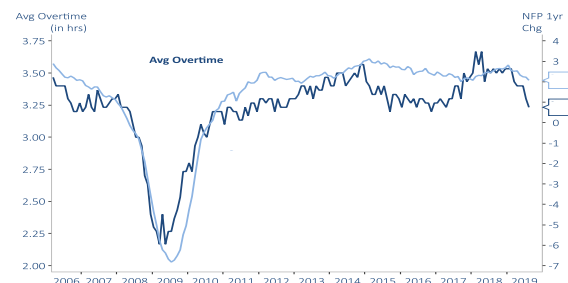


Source: Investcorp, Macrobond

It might not take much for these developments to have a more far-reaching effect. While today's job market remains fairly tight and managements appear hesitant to make substantial job cuts, we are seeing growing signs that cautious corporate sentiment is having an impact on payrolls, potentially undermining confidence on the consumer side.

One example includes the recent decline in overtime hours, a development that has historically foreshadowed weakness in other employment-related measures. Should manufacturers decide that US trade frictions with China and Europe – and other concerns – are unlikely to be successfully resolved anytime soon, it could also lead to pressure on wages and cuts in staffing, undermining what has long been a key support for the overall economy.

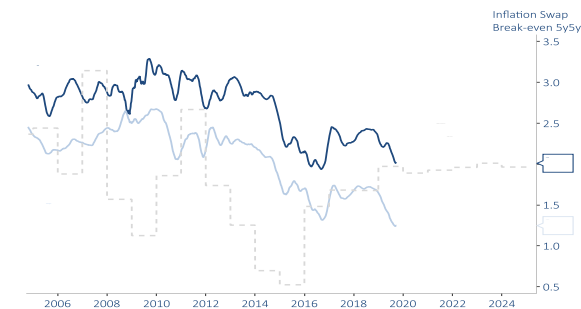
### US Job Market: Average Overtime and Non-Farm Payrolls Growth



Source: Investcorp, Macrobond

With respect to inflation, it is not surprising that the trend has largely mirrored the outlook for growth, though there has been a slight widening of output gaps in developed countries. As illustrated below, breakeven inflation rates have eased toward 2% in the US and fallen to a new low of 1.25% in Europe, leaving room for increased monetary policy stimulus. That said, there is some question, especially beyond our shores, of what central banks can do to further stimulate the economy.

### Inflation Breakeven & IMF Forecasts



Source: Investcorp, Macrobond

Other factors could alter the inflation dynamic, however. These include supply shocks, especially in energy markets, which could boost expectations for rising prices, though the oil market's response thus far to heightened geopolitical risks in the Middle East following the bombing of some Saudi Arabian production facilities has been muted. In any case, central banks would likely look through transitory supply-driven changes in prices, focusing instead on the downside risks of a concomitant falloff in aggregate demand.

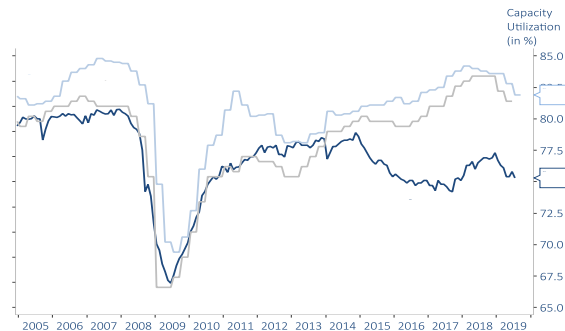
### What could swing the economic pendulum the other way?

Following our review of the trends in play, we direct our focus to the forces we see leaning against current momentum. In assessing what could turn the tide for the broader economy, we evaluate the usual contracyclical factors, primarily monetary and fiscal impulses, as well as those that could serve as sources of exogenous shocks, including various geopolitical developments.

As noted earlier, output gaps have been widening out again, as indicated by the first chart, aided by declines in capacity utilization rates in the world's three largest developed economies. Even so, job markets remain fairly robust by historical standards; as the second chart reveals, the average unemployment rate in the G3 countries hit a multi-decade low of 4.5% in September, accompanied by continuing reports from the corporate sector about labor shortages, especially for skilled positions.

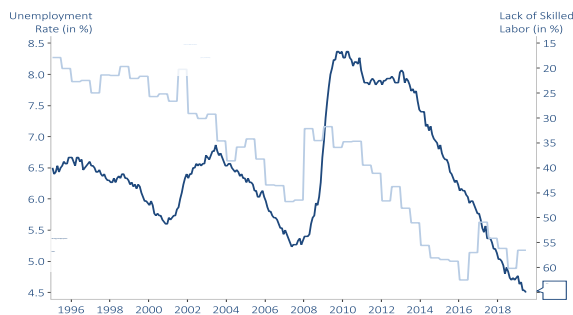
## GLOBAL MACRO ENVIRONMENT AND TRADITIONAL BETA MARKETS

### Capacity Utilization Rates in G3 Countries



Source: Investcorp, Macrobond

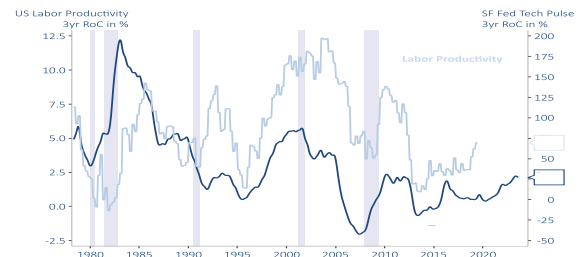
### Average Unemployment Rate in G3 and Lack of Skilled Labor Index



Source: Investcorp, Macrobond

Lower capacity utilization rates have created some room for a recovery, but any sustained pick-up in economic activity would likely require a surge in capital expenditures, allowing for greater productivity gains in an environment where the supply of labor is somewhat limited. While technology investments have certainly increased in recent years, as evidenced by the San Francisco Fed Tech Impulse detailed in the chart following, they have fallen short of what we saw in prior investment cycles, especially in the mid-1980s and late-1990s.

### US Labor Productivity and Technology Capex Index

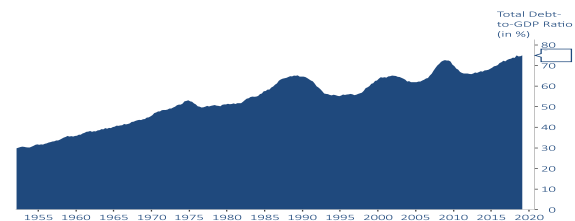


Source: Investcorp, Macrobond

It may well be that the new technologies are less capital intensive than previously, but we nonetheless doubt that the current upswing will enhance productivity as much as it did during past episodes of rapid innovation. Overall, we believe we will need to see the corporate world more broadly adopt and invest in new technologies to really move the needle.

Given the degree of political and policy uncertainty that exists, that prospect seems unlikely, at least in the near term. And even if this was not a big factor, the ability of corporates to step up capital expenditures appear to be constrained by elevated levels of leverage, highlighted in the following chart. Although interest rate coverage ratios remain manageable in an environment of tight credit spreads and low interest rates, high debt ratios have limited the appetite for further corporate borrowing.

### US Corporate Debt (as a % of GDP)



Source: Investcorp, Macrobond

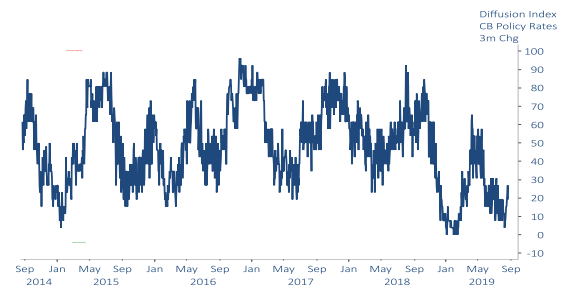
Turning to monetary policy, central bank dovishness remains the order of the day. As can be seen in the first chart below, our Global Monetary Policy Signal indicator, which represents the GDP-weighted difference between one-month interest rates and one-year forward one-month rates, reveals that markets now expect another 42 basis points of front-end rate declines over the next 12 months. This is a big turnabout from a year ago, when the crowd was anticipating 50 basis points of tightening; it is also a more dramatic response than we saw during the mid-cycle pause in early-2016. Thus far, the easing trend has been broad-based, as suggested by the second chart, with most emerging market central banks following the Fed's lead.

### Global Monetary Policy Signal



Source: Macrobond, Investcorp

### Global Monetary Policy Diffusion Indicator

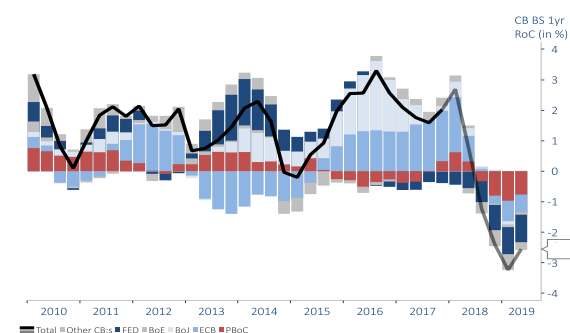


Source: Investcorp, Macrobond



Aside from guiding front-end rates lower, central banks have also amended their balance sheet policies, which, as shown below, had been less-than-accommodating. At this juncture, however, the Fed has suspended its quantitative tightening program and may further increase its securities holdings in coming quarters, prodded by heightened funding stress that revealed a need for increased bank reserves. The European Central Bank has also resumed its asset purchase program, targeting acquisitions of 20 billion euros a month on an open-ended basis.

#### Global Central Bank Balance Sheet Growth (in % of GDP)



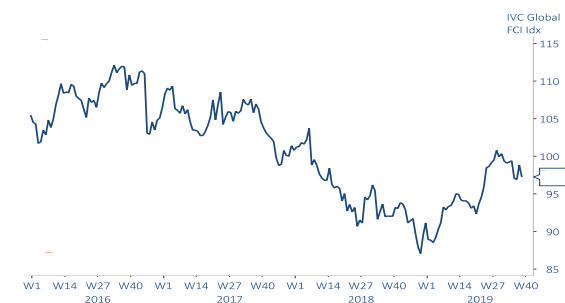
In addition, the ECB introduced a tiered system of interest rates, hoping to relieve, at least partially, the adverse impact that negative rates have had on European banks. While this acknowledgment of the side-effects of an ultra-aggressive accommodation policy is a step in the right direction, we remain doubtful about whether a more generous supply of liquidity will be enough to boost the demand for credit. As Mario Draghi hinted, a more decisive fiscal policy would be a better means of increasing investment demand at this stage, though there is little evidence so far of progress in this area.

That said, lower real interest rates, illustrated in the first chart below, have facilitated a significant loosening of global financial conditions – as can be seen in the second chart – even as economic momentum remains poor. A powerful weapon in the central bank arsenal, this secondary mechanism played a key role in reversing last year's downward spiral. Still, while accommodative monetary policies may have diminished the risk of the economy going into a tailspin, there is some question about whether they will be enough on their own to instigate a reacceleration. The answer may be “yes,” though an escalation in trade policy uncertainty would certainly make matters more difficult.

#### Global Real Interest Rates (in % of GDP)

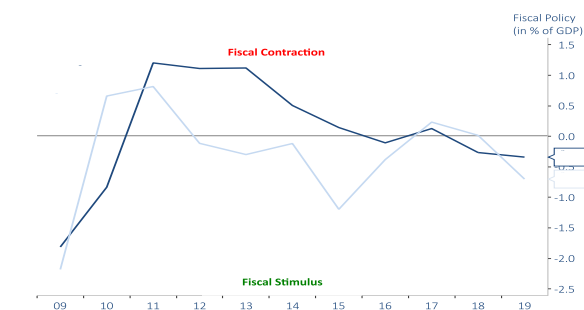


#### Global Financial Conditions Index



As noted above, increased fiscal accommodation has thus far been lacking, as evidenced below, but calls for more public spending have been intensifying. However, institutional headwinds remain, especially in Germany, and progress has been limited. Unless macroeconomic data takes another turn for the worse, the odds that we will see a decisive fiscal package in Europe appear fairly low, at least for now. The pain threshold for fiscal policymakers in the region seems to be much higher than for their monetary counterparts, with a response function that is correspondingly slower and more complex.

#### Global Fiscal Impulse (as a % of GDP)

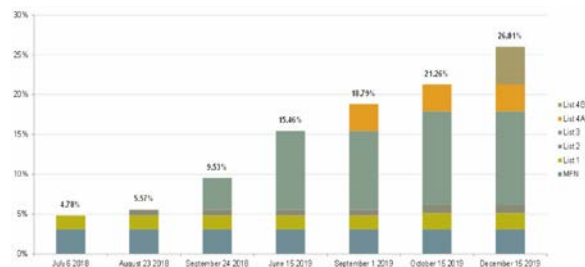


We have previously highlighted the adverse impact that trade policy uncertainty has had on economic activity in recent quarters. But it is not only US-China frictions that are undermining confidence; the threat of higher US tariffs on European imports are also a concern. That said, it is possible that a resolution of the former through a series of “mini deals” – involving, say, the US easing pressure on Chinese giant Huawei and rolling back some tariffs – detailed in the next chart – in exchange for new Chinese purchases of American agricultural products and other goodwill gestures – could alleviate some of the pressures.



## GLOBAL MACRO ENVIRONMENT AND TRADITIONAL BETA MARKETS

### Schedule of US Average Tariffs on Chinese Imports



Source: BNP Paribas

In our view, however, the heightened uncertainty in effect since last year, illustrated below, will not disappear; corporate leaders now have to incorporate volatile policymaking and the winds of anti-globalism into investment decision-making. We also believe the odds that we will see a game-changing deal between the US and China that addresses the key strategic issues, are very low. Mistrust between the two countries has escalated over the past year, and many US demands run counter to the strategic policy choices affirmed by President Xi.

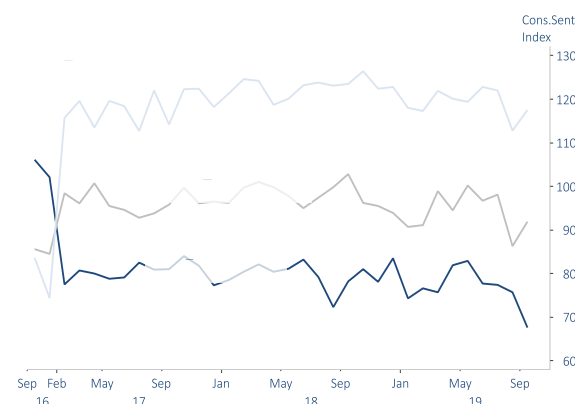
### News-Based World Economic Uncertainty



Source: Investcorp, Macrobond

At this point, a further escalation of trade tensions remains a possibility, though it may be difficult for Mr. Trump to continue with his aggressive stance coming into a presidential election year. As the following chart indicates, confidence among Republicans and independents has slipped back from recent highs, suggesting near-term political considerations may begin to hold sway over policy-making agendas.

### US Consumer Sentiment by Party Affiliation



Source: University of Michigan, Investcorp, Macrobond

Separately, one development that bears watching is the pace of credit expansion in China, which is already showing signs of exhaustion. As suggested by the next chart, the recent turnabout stands in sharp contrast to what we saw during the 2009, 2012 and 2015 releveraging cycles. As we have noted previously, Chinese policy stimulus measures have been largely incremental in nature, driven by efforts to strike a balance between increased growth, on the one hand, and the desire for structural reforms and longer-term financial stability, on the other.

### Credit Creation in China



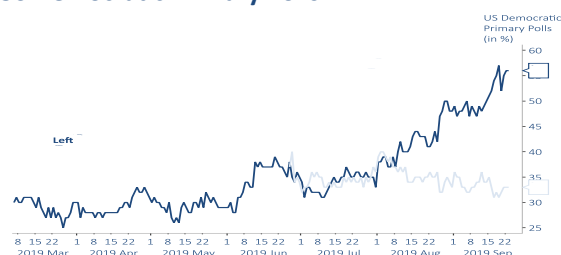
Source: University of Michigan, Investcorp, Macrobond

We expect continued accommodation in the months ahead, particularly if trade negotiations fail to produce a satisfactory result, but calibration risks remain. This seems especially true with respect to the Chinese currency. The PBoC has already signaled its unwillingness to aggressively defend the yuan by lowering its US dollar-renminbi fixing threshold below the symbolic 7.0 level, but memories of the 2015 upheaval remain fresh in policymaker minds. The currency may well continue to weaken, but the Chinese central bank will likely seek to keep things under control to avoid the speculative attacks and large capital outflows that marked the earlier episode.

As far as political developments go, it is worth keeping a close eye on the Democratic primaries. Left-leaning candidates, most notably Senator Elizabeth Warren, have been gaining traction relative to those who are more centrist, including former Vice President Joe Biden, as indicated in the following chart.

Although we are still very early in the race, a continuation of this trend could lead markets to begin pricing in the risk of a less corporate-friendly policy agenda from late-2020 onward. This would likely reverberate across sectors and themes and set the stage for increased US fiscal stimulus down the road.

### US Democratic Primary Polls



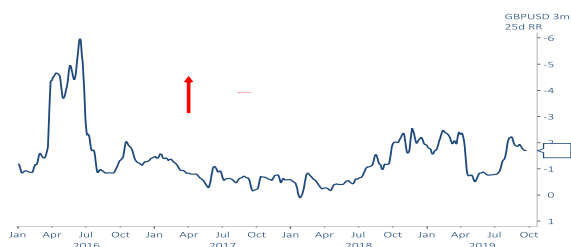
Source: Investcorp, Macrobond

In Europe, meanwhile, the Brexit saga continues to be a major source of uncertainty. At this juncture, the situation remains fluid, especially in the wake of the ruling by the UK Supreme Court that Prime Minister Boris Johnson's move to suspend Parliament was illegal. Previously, the House of Commons had been successful in passing the Benn bill, which was designed to force Mr. Johnson to seek an Article 50 extension to January 31 if he is not successful in securing a deal before the next EU Summit on October 17. The House also denied the prime minister's request for elections before the October 31 deadline.

Overall, the recent series of events represents a major setback for Mr. Johnson and could force him to refocus efforts on delivering some kind of a deal, if only for the benefit of his party's electoral fortunes, before the next Parliamentary session. As it stands, UK elections are likely to take place in November; upcoming party conventions will likely provide greater clarity regarding the matter.

On the heels of recent developments, the British pound has rallied and volatility skews have eased, as shown below. However, this probably owes more to the diminished short-term risk of a "no deal" exit, the potential for more positive headlines as Mr. Johnson begins trying to work out a compromise, and extended bearish positioning in the UK currency than a meaningful shift in probabilities related to the Brexit denouement. In our view and that of others, the outlook remains very uncertain; the odds of a no-deal exit heading into the first half of next year are still at 50%.

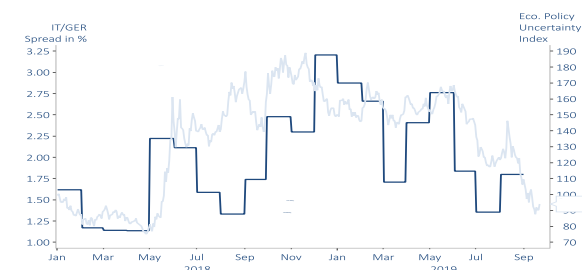
### Skew in GBP Options



Source: Bloomberg, Investcorp, Macrobond

Over in Italy, the situation seems to have improved somewhat. Investors had previously been worried about the potential for a snap election and a more decisive victory for Mario Salvini's Lega party and its anti-Europe platform. Fears were also fanned by speculation that the Five Star movement – which has lost ground, according to recent polls – was incentivized to seek an alternative coalition to maintain its place in government. However, overtures from the Democratic Party and the influence of President Mattarella spurred the creation of a new coalition based on a technocratic center-left agenda. As suggested by the next chart, this development appears to have eased uncertainty going forward.

### Italian Sovereign Spreads and Economic Policy Uncertainty



Source: Bloomberg, Investcorp, Macrobond

Finally, we conclude with some thoughts on the geopolitical situation in the Middle East. Until recently, hopes had been raised for a break in the US-Iran impasse in the wake of the August G7 meeting in France and the surprise September 10 departure of National Security Advisor John Bolton, a long-time Iran hawk. There had also been talk of a meeting between President Trump and Iran President Rouhani at the upcoming UN General Assembly meeting in October. However, the surprise September 14 drone attack on major Saudi oil infrastructure appears to have undermined such efforts and triggered a dramatic change in tone.

### Crude Oil Brent Prices



Source: Bloomberg, Investcorp, Macrobond

## GLOBAL MACRO ENVIRONMENT AND TRADITIONAL BETA MARKETS

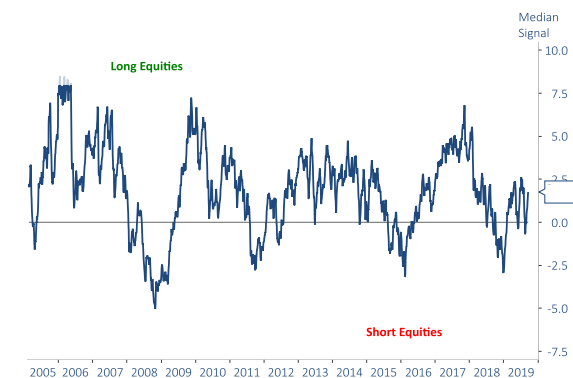
### What's priced in?

There is more to our outlook than economic, political and geopolitical themes and dynamics. As usual, we also incorporate data on sentiment and positioning across different markets and investor segments into our analysis. This helps us to identify areas where our views diverge meaningfully from market assumptions, potentially shedding light on opportunities for tactical asset allocation. The following paragraphs provide a brief overview of our thoughts in this regard.

### Equities

We begin our discussion of equity markets with an update on our price-based momentum signal, highlighted below. According to the latest readings, trend-following models remain slightly long, though we saw a measure of volatility in the gauge during the summer.

### Global Equity Momentum Signal

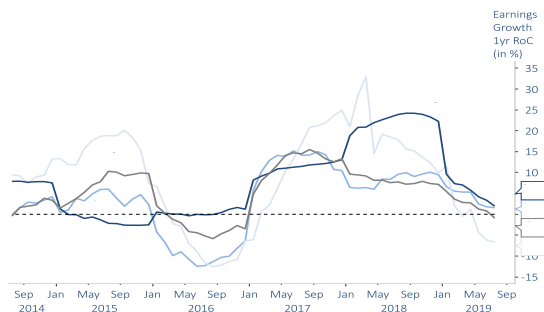


Source: Investcorp, Macrobond

The picture is slightly different with respect to its fundamentally oriented counterpart. As can be seen in the following chart, earnings momentum continued to weaken over the course of the third quarter.

Looking forward, growth in the measure is expected to be barely positive across most regions, with emerging markets and Japan poised to see outright earnings recessions.

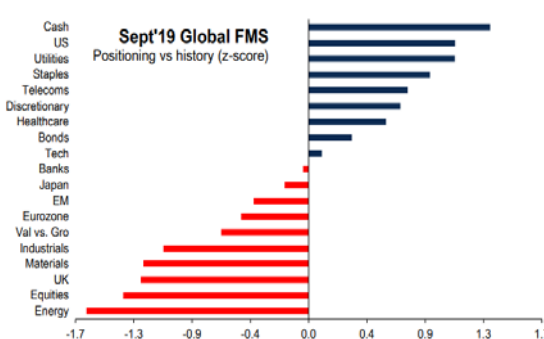
### Global Earnings Growth



Source: Bloomberg, Investcorp, Macrobond

On the positioning front, Bank of America Merrill Lynch's Global Fund Manager Survey suggests that investors remain cautious. As indicated by the chart below, cash currently represents the most overweight position, followed by defensive equity groups, including utilities, consumer staples and telecom. In contrast, cyclical sectors, including energy, materials and industrials, are at the bottom of the list.

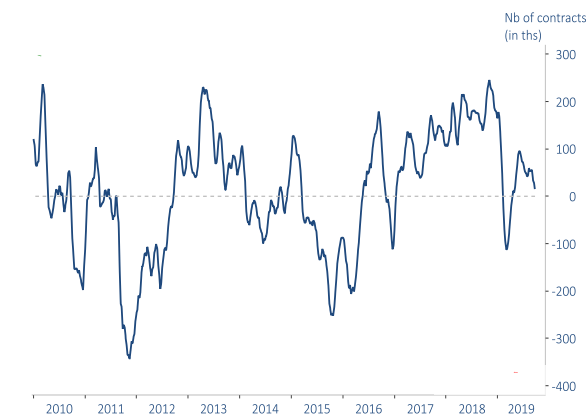
### Global Fund Manager Survey



Source: BAML

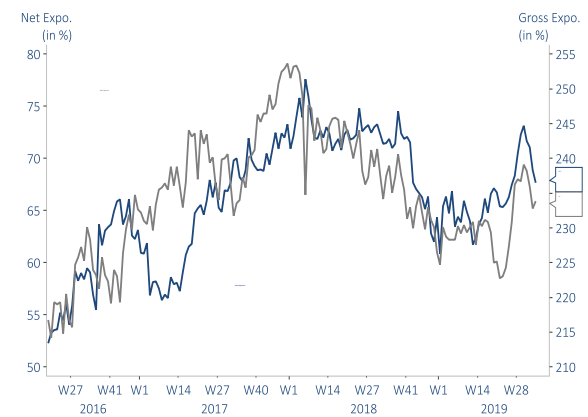
Investors' guarded stance may be less than it seems, however: based on the following two charts, systematic traders and hedge funds have increased equity exposures to levels that are near historical averages. We have also seen some signs of a bottom in individual investor sentiment, as the third chart suggests, potentially signaling rising share prices ahead, at least in the near term.

### Speculative Futures Equity Positioning



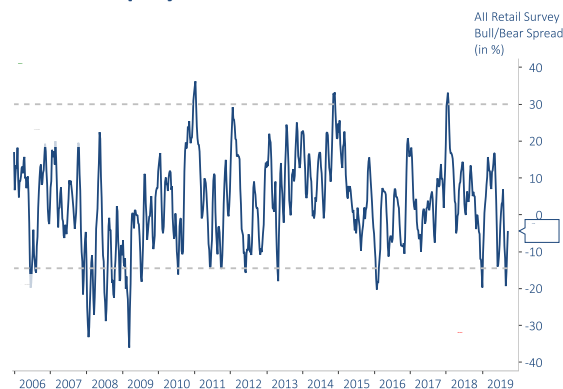
Source: Bloomberg, Investcorp, Macrobond

### Equity Hedge Funds Net and Gross Equity Exposure



Source: Goldman Sachs, Investcorp, Macrobond

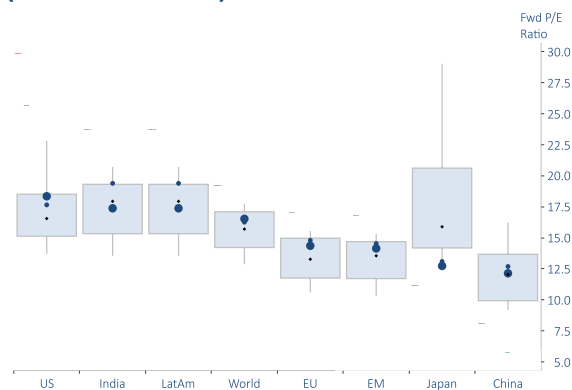
## US Retail Equity Sentiment



Source: Bloomberg, Investcorp, Macrobond

Equity valuations have, with the exception of Japan, turned more demanding, suggesting a paucity of bargains. Based on the following chart, which details forward price-to-earnings ratios for regional equity indices in a historical context – with the shaded areas representing the 25th to 75th distribution percentiles – most markets are screening toward the top-end in relative terms.

## Equity Valuations in Historical Distribution (Forward P-E Ratio)

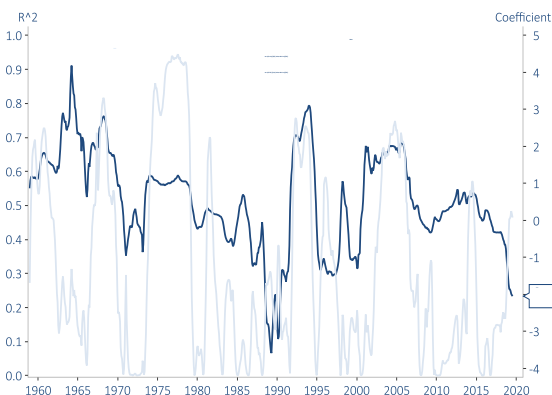


Source: Bloomberg, Investcorp, Macrobond

Some would say the situation is less clear cut than that. There has been some debate, for instance, regarding the influence that low interest rates are having on valuations, with analyses of the equity risk premia being offered as one rationale for why the former leads to the latter. However, this argument partly ignores the fact that rates are where they are because of a tepid outlook for the economy, which likely also means lower equity earnings potential in the years ahead.

An analysis of historical rolling beta of changes in US equity valuations (based on the P-E ratio) versus movements in real interest rates provides some useful context. As the following chart shows, the former variable is near multi-decade lows, indicating that the relationship between rates and valuations has indeed been strong in recent times. But investors should be conscious of where things are in historical terms and the possibility that the current extremes may be setting the stage for a reversal of fortunes.

## Relationship between Real Interest Rates and Equity Valuations



Source: Bloomberg, Investcorp, Macrobond

## Fixed-Income

In the fixed-income arena, our momentum signal witnessed a measure of retracement from the long-positioning extremes seen after September's mild downtick in short-term interest rates, as shown below. Nevertheless, this model indicates that exposures remain very long.

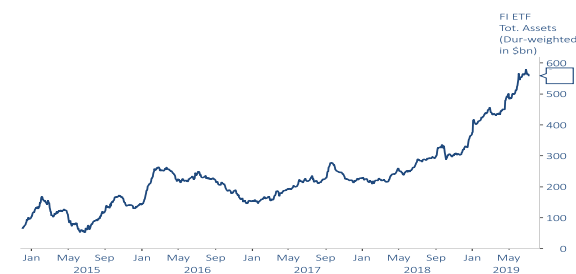
## Global Government Bonds Momentum Signal



Source: Bloomberg, Investcorp, Macrobond

An increased appetite for safe havens is one factor that has driven the sharp rally in bond prices this year. As the following chart illustrates, individual and other investors have poured massive amounts of capital into US fixed-income exchange-traded funds (ETFs). On a duration-adjusted basis, assets under management have nearly tripled over the past six months.

## Investment Flows into Fixed-Income ETFs (US, Duration-Weighted)



Source: Bloomberg, Investcorp, Macrobond

## GLOBAL MACRO ENVIRONMENT AND TRADITIONAL BETA MARKETS

At this point, however, we find little appeal in developed country government bonds when value and carry investment signals are taken into account. As the following chart illustrates, the term premium has fallen to historical lows; at the same time, econometric value models suggest that yields have moved dramatically away from fair value. Under the circumstances, we prefer to express long-duration trades through relative value implementations, including going long US Treasuries versus short in German Bunds.

### US Term Premium



Source: Investcorp, Macrobond

Lending further weight, carry is also near levels that suggest no real margin for error. As can be seen in the chart below, average annual carry across maturities in developed countries, including coupons and roll-down, has hit a new low of 55 basis points, suggesting that government debt has little to offer from this perspective.

### Developed Country Average Annual Carry in Government Bonds



Source: Investcorp, Macrobond

### Commodities

As far as commodities are concerned, the picture is somewhat mixed. On an aggregate basis, momentum signals remain slightly negative, as suggested below; however, there is large signal dispersion across individual contracts and sub-groups.

### Commodities Momentum Signal



Source: Investcorp, Macrobond

Breaking things down, gold investment vehicles, for example, have seen large inflows in recent months, accentuated in part by the metal's breakout above multi-year resistance of \$1,350 an ounce, as can be seen in the chart below. Against the backdrop of central bank rate repression and a rise in the share of debt trading at negative yields, trend-followers have been chasing the move higher.

### Commodity ETFs – Investment Flows

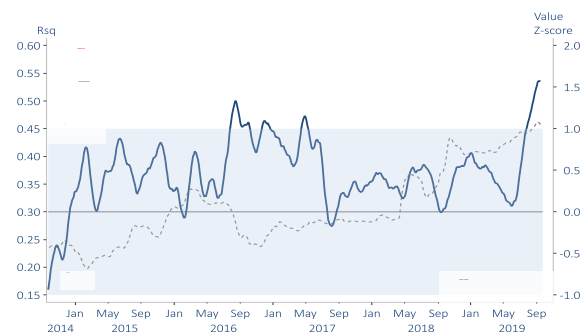


Source: Investcorp, Macrobond

Coming into the year, we were constructive on gold. However, we have recently turned neutral; our cross-asset value model, which uses real interest rates and movements in the US dollar to predict future performance – and which is illustrated in the next chart – suggests that the metal has overshot upside expectations by a decent margin. Given that momentum models are flashing green, we do not necessarily anticipate a large retracement, but expect the risk-reward profile to be more symmetrical going forward.

Still, with long positioning now the consensus, we believe the risks are to the downside, especially if the global economy manages to avoid a recession in the coming quarters.

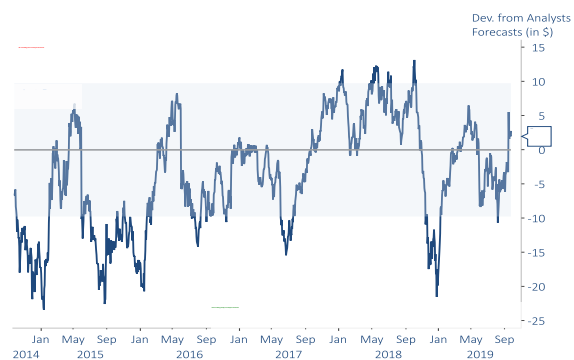
### Gold Value Model



Source: Investcorp, Macrobond

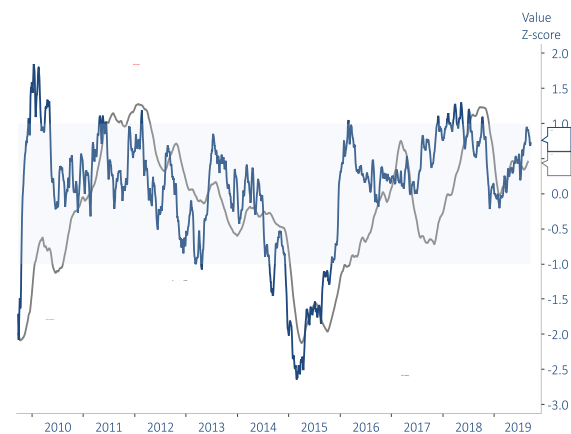
Our value models also suggest that there is limited upside in crude oil. As the following charts illustrate, measures derived from analysts' forecasts, leading manufacturing indicators, and cross-asset drivers – energy equities and corporate credit – all suggest that the commodity has reached levels that offer little to go for.

### Crude Oil Value Model (Analysts Forecasts)



Source: Investcorp, Macrobond

### Crude Oil Value Model (Manufacturing Surveys, Cross-Asset)



Source: Investcorp, Macrobond



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### Asset Allocation Playbook

We believe the current environment calls for patience and prudence. In light of the fragilities still emerging within the global economic system, we prefer to adopt a lower risk profile, building dry powder to seize future opportunities when they present themselves. As we have learned again in 2018, cash not only offers a decent carry but also preserves the optionality to invest at better valuations. Structurally lower liquidity across markets means severe dislocations are likely to be back in the not-too-distant future.

A weaker macro-economic momentum and extreme policy uncertainty have certainly raised downside risks for pro-cyclical assets. The manufacturing recession could well spill-over to the consumer sector through the labor market or confidence channels. The decisive response from central banks may prove sufficient to avoid an outright recession but fiscal support remains lacking.

We seek to build resilient portfolios that can deliver attractive risk-adjusted returns across the large set of potential macro-economic scenarios ahead. We are looking to achieve this outcome by balancing limited upside capture, in certain value sectors/geographies and exposure to secular trends, a positive carry profile that should help deliver in our “muddle-through” base case while protecting on the downside through a focus on alpha-centric strategies and hedging programs.

Finally, at this stage of the cycle, we prefer to keep a higher liquidity profile, to maintain optionality, unless the idiosyncratic liquidity premium/profile endogenously creates a decent margin of safety.

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## ALTERNATIVE RISK PREMIA

| Asset Class         | Strategy       | Negative                                                                            | Neutral                                                                             | Positive                                                                             | Comments                                                                                                                                                                                     |
|---------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Equities</b>     |                |                                                                                     |                                                                                     |                                                                                      |                                                                                                                                                                                              |
|                     | Low Beta       |    |    |    | Extreme valuations and elevated positioning leave us guarded here; at risk of a sharp reversal if Fed ahead of the curve & steepening of the yield curve                                     |
|                     | Momentum       |    |    |    | Momentum has turned very defensive, aligned with low risk. Turning point for the economy with major catalysts ahead (trade) suggest caution in light of elevated positioning and valuations. |
|                     | Quality        |    |    |    | Neutral allocation on higher positioning, offset by positive signals from macro                                                                                                              |
|                     | Value          |    |    |    | Greater value in value today, fears of turn in cycle overdone and resteeptening of the yield curve could make an attractive play, barbell with quality exposure.                             |
|                     | Carry          |    |    |    | Neutral outlook on mixed signals.                                                                                                                                                            |
|                     | Mean Reversion |    |    |    | Shift lower in realized volatility is a headwind but out positive outlook on volatility in the coming months leaves us moderately overweight.                                                |
| <b>Fixed Income</b> |                |                                                                                     |                                                                                     |                                                                                      |                                                                                                                                                                                              |
|                     | Carry          |    |    |    | Stay underweight at current carry levels across developed markets, opportunities remain in more niche developing or municipal bond markets. Opportunities in EM carry and EM FRB.            |
|                     | Momentum       |    |    |    | At strategic.                                                                                                                                                                                |
|                     | Value          |    |    |    | Meaningful divergence across value signals (absolute rates, real rates ...) suggests caution for this universe.                                                                              |
| <b>Commodities</b>  |                |                                                                                     |                                                                                     |                                                                                      |                                                                                                                                                                                              |
|                     | Carry          |   |   |   | Neutral as carry/seasonal patterns no longer supportive.                                                                                                                                     |
|                     | Curve          |  |  |  | Neutral allocation on mixed signals.                                                                                                                                                         |
|                     | Momentum       |  |  |  | Positive fundamentals in late-stage business cycle but crowding risks have risen with stretched positioning in the energy complex for example.                                               |
| <b>FX</b>           |                |                                                                                     |                                                                                     |                                                                                      |                                                                                                                                                                                              |
|                     | Carry          |  |  |  | EM Carry offers attractive opportunities at current levels of valuations and carry. Retain underweight on G10 carry and prefer EM expressions instead.                                       |
|                     | Momentum       |  |  |  | Strategy well positioned to monetize ongoing trends in DM and EM FX.                                                                                                                         |
|                     | Value          |  |  |  | Risky period for GBP given new PM lack of strategy and tight deadline, consider hedging. Look for entry points in JPY, EUR as defensive play.                                                |
|                     | Mean Reversion |  |  |  | Higher volatility should help the strategy harvest gamma; factor has historically done well in high volatility environments and periods of volatility compression.                           |



## ALTERNATIVE RISK PREMIA

### Outlook for Alternative Risk Premia Strategies

#### **Equity**

Our outlook for 2019 includes a low expected return for low beta, on elevated valuations and one-sided positioning. The strategy has been a recipient of large inflows on the back of last quarter market volatility and move lower in interest rates. We still prefer to fade the recent strength, at current levels. Similarly, we are underweight momentum on large binary catalysts ahead that risk catching the factor by surprise. The ongoing US/China trade negotiations could well lead to an upside surprise for cyclicals; the ensuing short covering in cyclicals would prove costly to momentum shorts. We prefer a barbell approach of quality & value for the year which should offer a balanced factor allocation for both upside and downside scenarios. Quality could well continue to benefit from stress in corporate credit markets should the growth momentum continue to deteriorate while value should be a strong benefactor of a revival in cyclical sectors, with historically cheap valuations a major tailwind. Finally, we stay overweight on mean-reversion strategies.

#### **Fixed Income**

In Fixed Income we remain underweight Carry and Value strategies. Interest rate differentials have compressed again over the past quarter leaving meager pickings for naïve carry implementations. In contrast, the divergence across value signals – e.g. real vs. nominal rates – suggests caution for this universe for the coming months. We stay neutral for momentum where the universe seems best positioned to capture a change in market direction.

#### **Commodity**

In Commodities we stay neutral on plain-vanilla Carry strategies, where carry and seasonal signals have turned less supportive. We retain neutral outlooks for both Curve and Momentum.

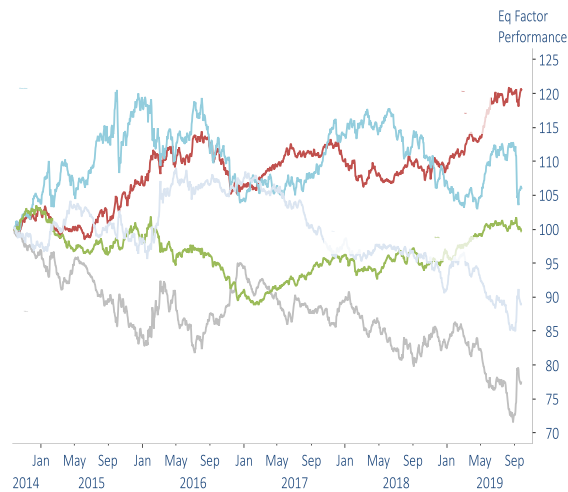
#### **FX**

In Foreign Exchange, we remain excited by the performance potential available in carry strategies, particularly within emerging markets. Elevated carry, relatively attractive valuations and headwinds to further dollar upside give us strong conviction. We stay overweight Mean Reversion as higher volatility should help support gamma harvesting algorithms. Mean Reversion has historically done well in both turbulent times and periods of volatility compression. Finally, we stay neutral on Value on higher Brexit risk in the coming months despite greater appetite for EUR and JPY.

## Equity

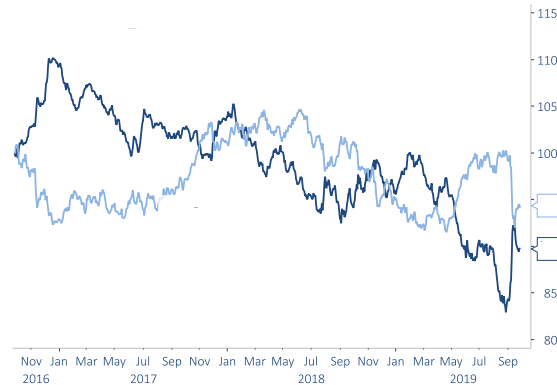
Despite rising volatility and a “momentum crash” in September, the performance of a global multi-factor equity portfolio was resilient last quarter. In particular, the bid on duration helped low volatility and quality to lead the pack, as can be inferred from the first chart below. The relationship between momentum and value, meanwhile, witnessed a violent about-face, as the second chart shows. Though it is hard to identify a single catalyst for the move, the leading candidates appear to be a potential bottom in rates, economic surprises to the upside, and a pause in US-China trade frictions. However, the lack of reverberations across other asset classes suggests that lop-sided positioning was the primary culprit.

### Global Equity Factor Performance



Source: Investcorp, Macrobond

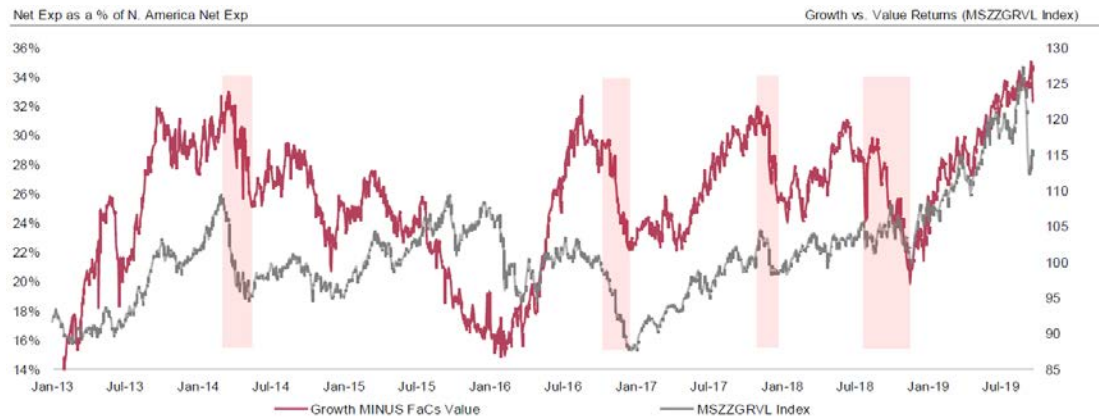
### Momentum Crash



Source: Investcorp, Macrobond

As we noted in prior Environment Reports, positioning in and the valuation of momentum had previously reached extremes by historical standards. At this juncture, a similar development appears to be playing out in growth. As the following chart from Morgan Stanley Prime Brokerage’s Strategic Content Group shows, net exposure to the factor has risen to 34%, its highest level since the series began in 2013. Given its strong performance over the past year, it is likely that the overlap between momentum and growth has been expanding, potentially setting the stage for a dramatic reversal of fortunes.

### Extreme Growth-Value Positioning Among Equity L/S Hedge Fund

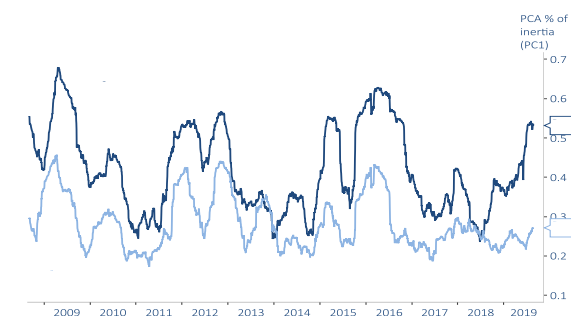


Source: Morgan Stanley

## ALTERNATIVE RISK PREMIA

Momentum had also become entangled with other factors, including low beta, helping to lower the diversification potential of multi-factor equity portfolios. Based on the following chart, which details the rolling percentage of variance explained by the first factor in a principal component analysis across equity factors in developed and emerging markets, it seems apparent that performance is being influenced by a narrow list of drivers. In fact, the first principal component now explains more than fifty percent of the return variance in developed markets.

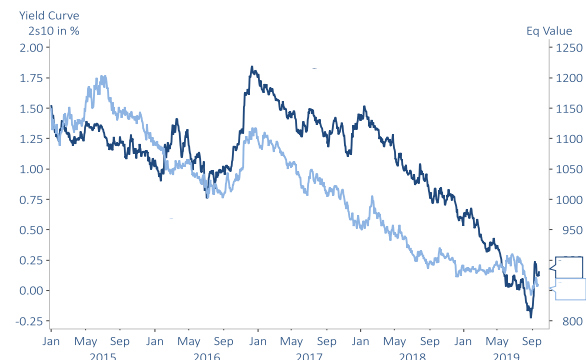
### Diversification Available in Multi-Factor Equity Portfolios



Source: Investcorp, Macrobond

With that in mind, we would be cautious about chasing the recovery in value, as other signals offer little evidence in support of a sustainable rally. While it is not unusual to see a technical rebound evolve into something greater, especially when it involves aggressive large-scale short covering, we have not (yet) seen any real evidence of a turnaround in macroeconomic indicators or the yield curve. In our view, value is attractive in the longer run, but we would favor tactically taking some profits here.

### Performance of Equity Value vs. the Yield Curve



Source: Investcorp, Macrobond

Separately, it is worth noting that low beta, often seen as a fixed-income proxy, has helped satisfy at least some of the appetite for global duration, but, again, things seems to have gotten ahead of themselves, as the following chart suggests. Given current valuation and positioning levels, we believe this factor has a poor risk-reward profile and would continue to favor a barbell allocation split between quality/growth and value.

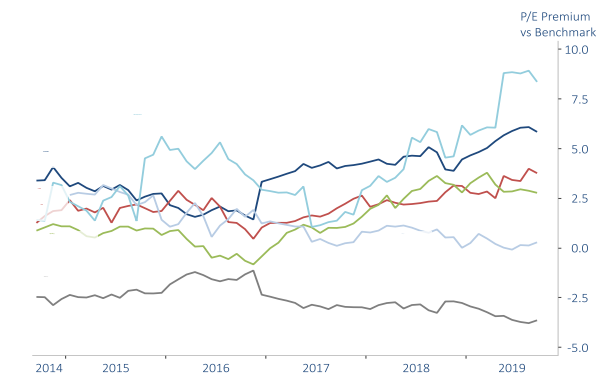
### Performance of Equity Low Beta and US 10-Year Yields



Source: Investcorp, Macrobond

For all the Sturm und Drang, the recent sell-off in momentum across the globe barely put a dent in its extreme valuation relative to history and other factors. At the other end of the spectrum, the “value” in value, based on the discount to historical averages of its aggregate price-to-earnings and price-to-forward-earnings ratios – as illustrated by the chart below – remains attractive. In our view, current prices already take account of poor macroeconomic conditions, suggesting an attractive risk-reward profile going forward. Should growth re-accelerate, value would likely generate strong performance.

### Global Equity Factor Evaluations

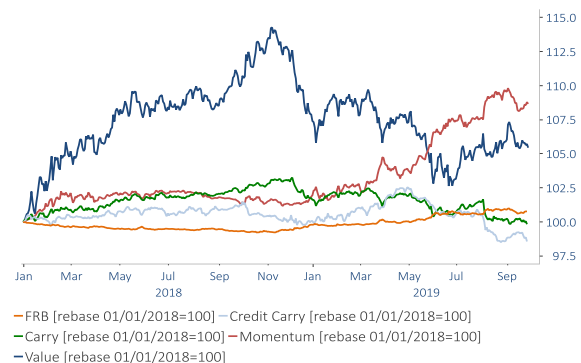


Source: Investcorp, Macrobond

### Fixed Income

In the fixed-income arena, trend-following strategies have delivered outsized gains this year, with long-duration directional plays, in particular, paying off handsomely, as indicated in the following chart. Carry algorithms have also benefited from the mild contraction in interest-rate differentials, while value strategies, in contrast, have struggled. Corporate credit risk premia have also disappointed, with carry underperforming over the summer.

## Fixed-Income Risk Premia Performance (Last 12 Months)



Source: Investcorp, Macrobond

Given the length and breadth of the move we have seen in fixed-income, it comes as no surprise that trend-following exposures have substantially increased across geographies and tenors, and that momentum has been an outperformer. As shown below, the average historical trend signal in developed market government bonds have been on an upward tear since late-2018, testing a multi-year high above 8 amid the August growth scare before pulling back in September.

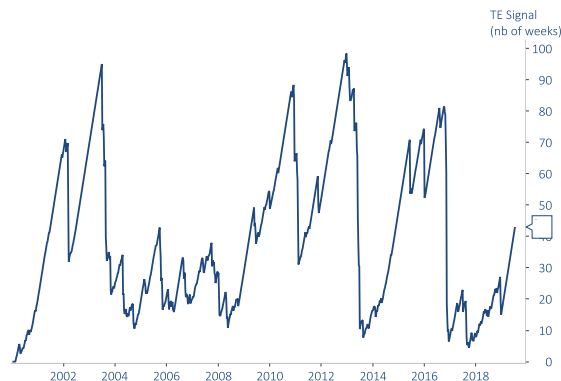
## Developed Country Interest-Rate Swaps – Average Momentum Signal



Source: Investcorp, Macrobond

Similarly, our trend exhaustion indicator has also gained steam, as shown below, though at it remains well below prior peaks.

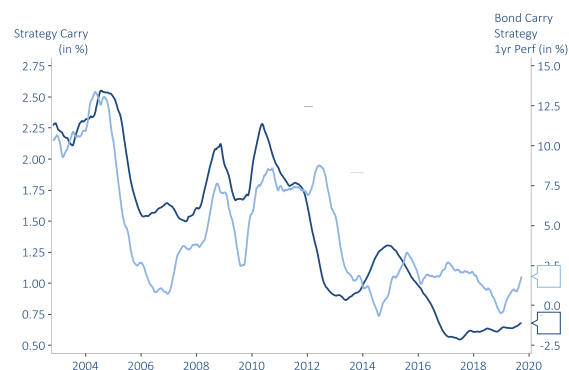
## Trend Exhaustion Signal – Interest-Rate Swaps



Source: Investcorp, Macrobond

Still, even with the recent uptick in performance, we are cautious and remain underweight naïve bond-carry strategies. The annual carry generated by a long/short portfolio remains close to its historical lows, as can be seen in the first chart below, signaling limited upside ahead.

## DM Cross-Sectional Government Bond Carry Strategy vs. Annual Carry



Source: Investcorp, Macrobond

## IG/HY Credit Fair Value



Source: Investcorp, Macrobond

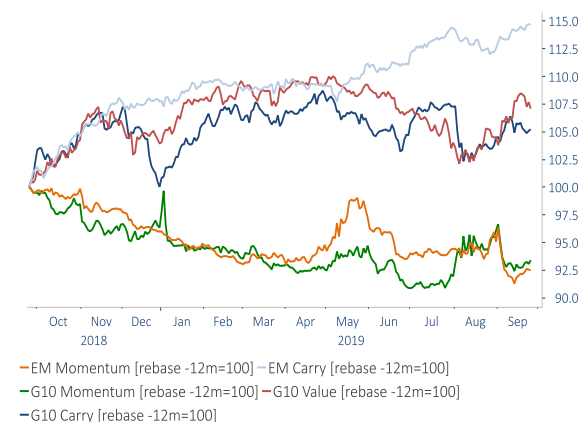


## ALTERNATIVE RISK PREMIA

### Foreign Exchange

In foreign exchange markets, performance this year – illustrated by segment in the chart below – has been led by emerging market carry. While G10 carry, momentum and value strategies have witnessed higher volatility in recent months, the respective returns have not really followed suit.

#### Foreign Exchange Risk Premia Performance – Last 12 Months



Source: Investcorp, Macrobond

However, G10 momentum managed to post a gain, aided by a strengthening US currency. As can be seen in the following chart, which details the average signal across several key groups – commodity-related foreign exchange (e.g., AUD, CAD, NOK), Europe-centric pairs (e.g., EUR, SEK), low-beta Asia (e.g., TWD, SGD), safe havens (e.g., JPY, CHF), and high-carry emerging market countries (e.g., TRY, BRL, MXN, ZAR) – trend models have, with the exception of high-carry emerging market countries, generally been long the dollar.

#### Foreign Exchange Momentum Signal by FX Group

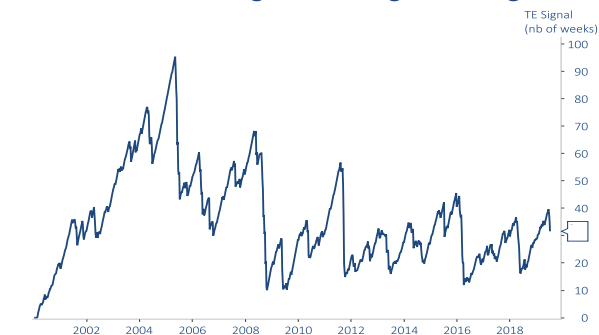


Source: Investcorp, Macrobond

In more granular terms, this trend has been most pronounced with respect to European crosses and low-beta Asian currencies, reflecting lower economic momentum in these countries amid weak manufacturing and a contraction in global trade, as well as the low carry associated with these pairs relative to the greenback.

Interestingly, our trend exhaustion signal for foreign exchange overall appears to have stalled, as suggested in the following chart; after the run-up from late-2018, the measure hit a wall earlier this year and has since been moving lower. The recent turnabout likely owes much to heightened turbulence in emerging markets this past summer, instigated largely by the surprise result in the Argentine primary elections, which reverberated across the continent. The accompanying fallout put pressure on long signals in high-beta pairs, such as those involving the Brazilian real.

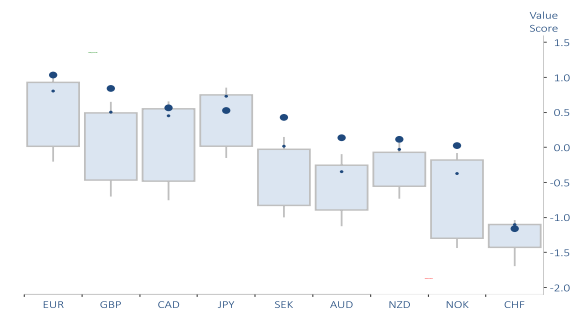
#### Trend Exhaustion Signal – Foreign Exchange



Source: Investcorp, Macrobond

Fundamentally-speaking, most G10 pairs have continued to move away from fair value, as indicated below, with the exception of the Japanese yen, where a modest appreciation turned things the other way last quarter. Ongoing uncertainty regarding Brexit spurred volatility in the British pound, though the gains have been limited so far. That said, value models offer only limited insight in this instance, as a no-deal outcome would create another structural break in the time series.

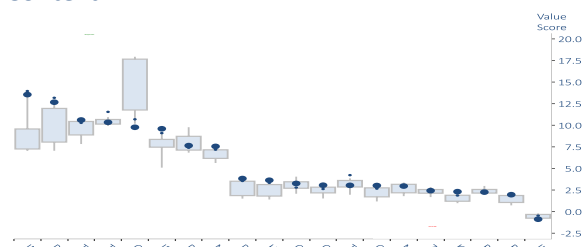
#### G10 Foreign Exchange Value Score in Historical Context



Source: Investcorp, Macrobond

Across emerging markets, meanwhile, the picture is somewhat more mixed, as the following chart illustrates, impacted by political, economic and geopolitical crosscurrents in both Latin America and Asia.

### EM Foreign Exchange Value Score in Historical Context



Source: Investcorp, Macrobond

In terms of carry, we continue to favor an EM expression based on valuation and where the measure now stands. As the following chart illustrates, G10 carry remains paltry, weighed down by narrowing interest-rate differentials among the countries involved. Along with a lower signal – on an absolute basis and relative to foreign exchange volatility overall – we believe there is little choice but to be underweight the strategy at present.

### Annual Carry in G10 Carry Strategy (Dollar-Neutral)



Source: Investcorp, Macrobond

However, the same does not hold true with respect to emerging markets; as the following chart indicates, carry has come in somewhat but still looks appealing in historical terms. Moreover, EM FX also appears cheap relative to its history when other corporate credit carry strategies are taken into account. Admittedly, price momentum has waned in recent months, but we see little reason not to be constructive. Assuming an outright global recession can be avoided, lower interest rates should continue to serve as a tailwind.

### Annual Carry in Emerging Markets Carry Strategy (Dollar Neutral)



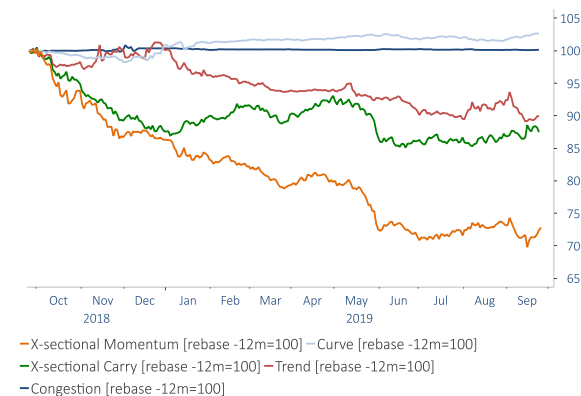
Source: Investcorp, Macrobond

## ALTERNATIVE RISK PREMIA

### Commodities

Following last year's challenging second half, the performance of commodity risk premia has stabilized, as can be seen in the chart below. Trend-following and cross-sectional momentum strategies are close to flat, while cross-sectional carry algorithms have witnessed a partial recovery from earlier drawdowns. Curve carry strategies, meanwhile, have continued to deliver robust risk-adjusted returns.

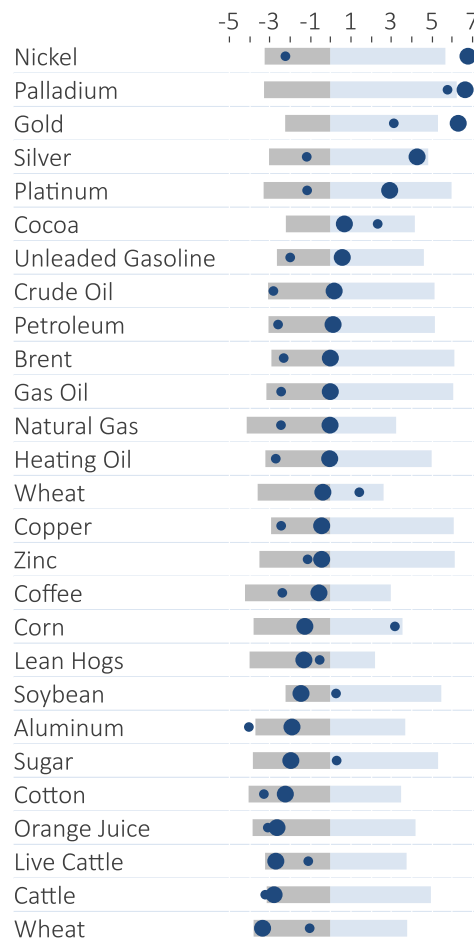
#### Commodity Risk Premia Performance – Last 12 Months



Source: Investcorp, Macrobond

As far as momentum is concerned, both the risk premia time series and its cross-sectional counterpart have taken on a defensive posture of late. As indicated by the following chart – which details the latest momentum scores (i.e., large blue bullets), those from three months ago (i.e., small blue bullets) and the 25th and 75th percentile score distributions over the past 20 years – there is something of a bifurcation: the strategies hold longs in precious and platinum group metals versus shorts in agricultural products, livestock, and certain industrial metals.

#### Individual Commodity Momentum Signals



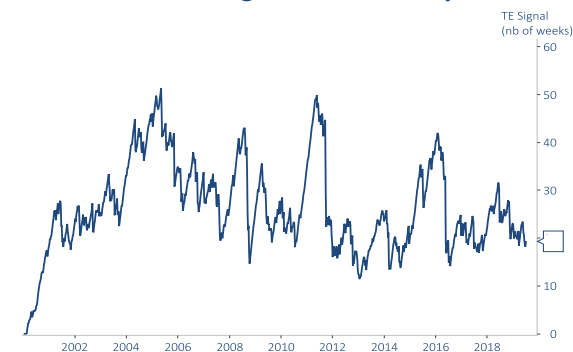
Source: Investcorp, Macrobond

In our view, such a portfolio will likely serve as a diversifier of risky assets, given that the run-up in precious metals has largely been driven by falling real interest rates. By the same token, the performance of certain agricultural products is being adversely affected by the escalation in

tensions between the US and China, with the latter's tit-for-tat decision to impose additional tariffs on US goods and suspend purchases of US soybeans representing a roadblock to higher prices.

Moreover, when looking at the commodity universe as a whole, we see little risk of a major reversal if our trend exhaustion signal is anything to go by. On balance, current trends remain relatively nascent and, as a consequence, speculative positioning has likely been limited. In fairness, positioning in gold and precious metals is somewhat extended, which suggests we could see increased volatility in that segment ahead.

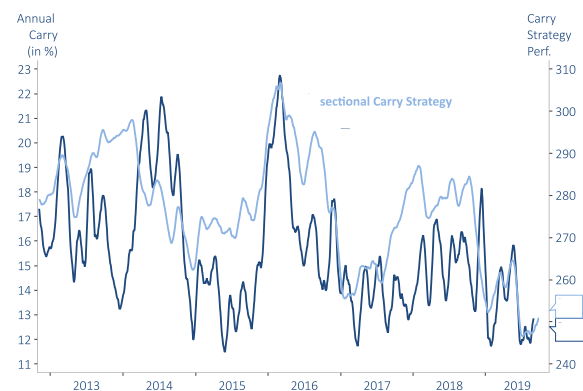
#### Trend Exhaustion Signal – Commodity Contracts



Source: Investcorp, Macrobond

Turning our attention to cross-sectional carry, we note that the strategy's embedded annual carry has been falling, trading at 12.9% most recently, as can be seen in the first chart. As we have noted in prior Environment Reports, we believe current levels represent an attractive entry point and we are growing more constructive. While we acknowledge that seasonal trends in October can be challenging, as the second chart shows, we recommend buying into weakness, assuming the carry profile remains in line with where it is now.

## Cross-Sectional Commodity Carry Performance and Annual Carry



Source: Investcorp, Macrobond

## Commodity Carry Seasonality

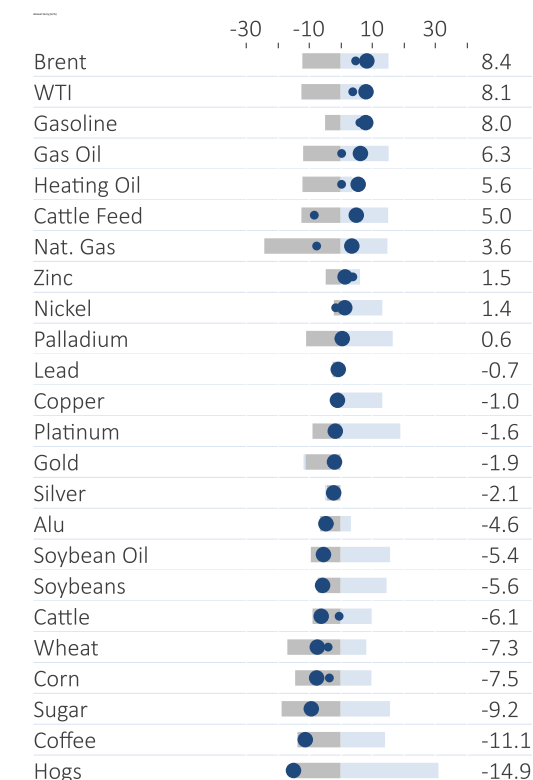


Source: Investcorp, Macrobond

Looking at matters from a slightly different perspective provides additional context as to where the opportunities are. Based on the following table, which details the annual carry for various commodities as derived from the respective futures curves, the energy complex is offering carry of approximately 8%, an attractive return at the higher end of its historical range.

At the other end of the scale, agricultural product and livestock futures are currently presenting negative carry profiles – ranging from -6% for cattle to as much as -15% for hogs.

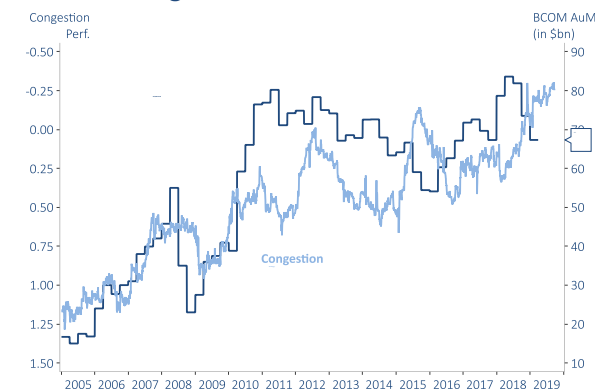
## Individual Commodity 12-Month Carry



Source: Investcorp, Macrobond

Finally, we conclude our discussion on alternative risk premia with an update of our chart comparing the composite performance of congestion strategies versus that of the assets underlying the Bloomberg Commodity Index. As illustrated in the following charts, the former segment has been at the forefront despite the outflows from commodity-indexed products that have been seen in recent months.

## Commodity Congestion Performance and Assets Under Management for BCOM



Source: Bloomberg, Investcorp, Macrobond

## HEDGE FUNDS

| Strategy                     | Negative | Neutral | Positive | Comments                                                                                                                                                                                                                                   |
|------------------------------|----------|---------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hedged Equities</b>       |          |         |          | Muted to slightly down equity moves anticipated, play managers with trading skills and be mindful of factor exposures to provide balanced exposure.                                                                                        |
| US                           |          |         |          | Prefer alpha or trading oriented managers, balance factor expo.                                                                                                                                                                            |
| Euro area ex UK              |          |         |          | Monetary policy support has limits in an environment of decelerating earnings and weak macro momentum. Some value exposure could be attractive in a portfolio context                                                                      |
| Japan                        |          |         |          | Value play but limited catalysts ahead and FX risk                                                                                                                                                                                         |
| Emerging Markets             |          |         |          | Sector has re-rated, limited valuations support from here                                                                                                                                                                                  |
| <b>Event-Driven</b>          |          |         |          | Tactical overweight in Merger Arbitrage as spreads widened in excess of fundamentals; stay neutral Special Situations                                                                                                                      |
| Special Situations           |          |         |          | Potential for diversifying value exposure relative to fundamental L/S funds. Seek diversification from momentum/growth plays                                                                                                               |
| Merger Arbitrage             |          |         |          | Greater opportunity as higher volatility & spreads opened up M&A spreads. Stay tactical                                                                                                                                                    |
| <b>Equity Market Neutral</b> |          |         |          | Limited beta and diversifying features attractive in late-cycle environment, underweight on factor strategies                                                                                                                              |
| <b>Macro Discretionary</b>   |          |         |          | Greater volatility should offer opportunities for RV/Trading managers but uncertainty over macro trends may limit upside potential near term. EM still has a place in a diversified portfolio                                              |
| <b>Macro Systematic</b>      |          |         |          | Neutral allocation: be mindful of extended longs in fixed income, greater potential in foreign exchange where volatility has stayed more muted so far                                                                                      |
| <b>FI Relative Value</b>     |          |         |          | Strategy has adapted well to a changing environment: it is less sensitive to balance sheet scarcity and well positioned to profit from funding dislocations.                                                                               |
| <b>Corporate Credit</b>      |          |         |          | Limited carry and asymmetric liquidity profile leave us underweight. Few dislocations to capture; prefer niche plays or wait for even better entry points                                                                                  |
| <b>Corporate Distressed</b>  |          |         |          | Stay out of traditional corporate distressed plays as tight spreads leave limited risk premium in distressed assets. Look for idiosyncratic themes & opportunities.                                                                        |
| <b>Structured Credit</b>     |          |         |          | Traditional structured credit offers limited carry and upside optionality, however idiosyncratic opportunities across near CLO refi's and resets, callable RMBS, and near-maturity CMBS offer potentially attractive risk-adjusted reward. |
| <b>Convertible Arbitrage</b> |          |         |          | Underweight on valuations headwinds, limited new issuance                                                                                                                                                                                  |
| <b>Vol Arb</b>               |          |         |          | Higher volatility environment here to stay, cross-asset & cross regions opportunities                                                                                                                                                      |



## HEDGE FUNDS

### Hedge Fund Strategy Outlook

We stay underweight **Hedged Equities** as we see limited tailwinds from beta, at current market levels. We believe volatility will return to equity markets and open better entry points in the coming month. Looming tail risks remain and create a large downside asymmetry to returns, in our view.

We remain neutral on **Special Situation** managers given the high consumption of equity beta budget. In **Merger Arbitrage**, we are staying tactical, seeking to increase exposure in periods when spreads widen in excess of their cross-asset anchors, i.e. equity volatility and investment grade credit spreads.

We continue to hold a constructive view on the **Macro Discretionary** investment style. Global macro managers are best equipped to monetize higher volatility and offer a valuable source of diversification in hedge fund portfolios, at this stage of the business cycle.

**Fixed Income Relative Value** remains a high conviction as greater velocity of flows and lower balance sheet capabilities from broker/dealers continue to support alpha generation. We continue to slightly underweight **Corporate Credit** managers. Credit relationships remain fairly tight and offer limited potential for alpha generation.

In **Distressed**, we maintain our neutral stance with an opportunity set bifurcated between tepid return expectations in traditional corporate distressed on the basis of compressed credit spreads relative to various risk measures and a greater performance potential in non-corporate idiosyncratic themes.

In **Convertible Arbitrage**, we move to an underweight position. The strategy is facing valuation headwinds and limited support from new issuance. We stay neutral on Structured **Credit** hedge funds. Consumer and housing credit offer better risk/reward, in our view, than traditional corporate credit.

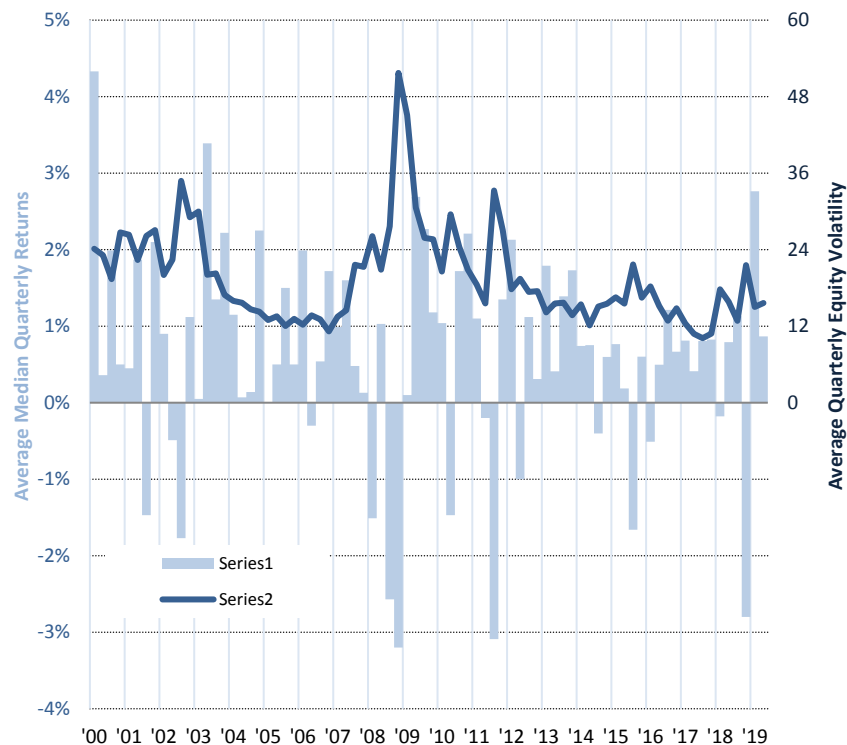
Finally, we retain our overweight in **Volatility Arbitrage**. The dislocation in equity volatility has opened up a range of attractive relative value trading opportunities, across products, geographies and asset classes.

## HEDGE FUNDS

### Equity Long/Short

| Driver of Strategy Returns | Negative | Neutral | Positive | Comments                                                                                                                                                                                                                                        |
|----------------------------|----------|---------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Valuation                  | ■ ■ ■ ■  | ■       | ■ ■ ■    | Valuations have reset higher and leave little room for error if the macro momentum fails to re-accelerate from current depressed levels.                                                                                                        |
| Earnings                   | ■ ■ ■    | ■       | ■ ■ ■    | Earnings growth has peaked and is likely to settle in the 0-5% in the United States. Consensus numbers will likely continue to be revised down.                                                                                                 |
| Stock Selection            | ■ ■ ■    | ■       | ■ ■ ■    | Equities pair-wise correlation has remained well behaved despite risk off environment, supported by large factor & sector rotation. At risk if the environment deteriorates further from current levels.                                        |
| Momentum / Sentiment       | ■ ■ ■    | ■       | ■ ■ ■    | Positioning has normalized with net exposures moving closer to historical averages and gross exposure still fairly elevated                                                                                                                     |
| Macro Fundamentals         | ■ ■ ■    | ■       | ■ ■ ■    | Recent disappointments in macro data likely transitory; reflationary environment consistent with positive returns for equities, albeit at a higher level of volatility as financial conditions tighten and excess liquidity is being withdrawn. |
| Liquidity & Financing      | ■ ■ ■ ■  | ■       | ■ ■ ■    | Not an issue for large and mid-cap names in developed markets; prime brokers are raising financing costs.                                                                                                                                       |

### US Hedge Equities Strategy



Median returns are those of Investcorp's strategy peer group. Strategy peer groups are created by Investcorp and are comprised of funds that Investcorp has judged to be relevant for each strategy.

Source: PerTrac, Investcorp



## Equity Long/Short

Global equity long/short hedge funds gained 0.61% last quarter and were up 7.88% for the year through September. Equity markets continued grind higher around the world with the MSCI World Index rising by 0.7% and 18.1% in the latest three-month period and year-to-date, respectively, while the S&P 500 rallied 2.2% and 21.0%, respectively, over the same spans.

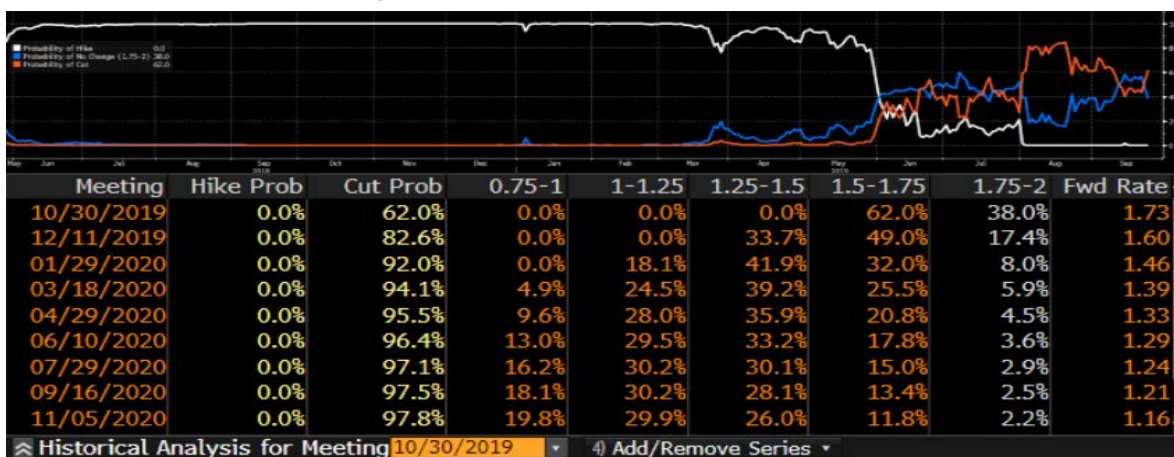
Despite the positive showing, especially year-to-date, we believe that equity markets will be largely rangebound going forward amid poor macroeconomic momentum and aggressive monetary accommodation, leading us to remain neutral on the strategy. In the US, in particular, prospects for further upside seem limited with a dovish Fed already priced in. And while valuations in the euro area and Japan are relatively more attractive than they were a short while ago, Europe's manufacturing cycle has yet to bottom and slowing global trade will prove a headwind for Japan. In addition, trade frictions between the US and China will likely continue to cast a shadow over the Asian region, heightening uncertainty.

In addition to our view that the big picture offers little to be enthusiastic about for now, geopolitical and other risks have led us to be neutral on all geographic regions. At this juncture, we would monitor factor exposures closely, aiming for a balanced approach, and favor managers with trading skills that will enable them to deftly maneuver around a tricky and challenging environment.

As alluded to earlier, the upswing in US equity markets since last December stems, in part, from heightened expectations for an easier Fed. Following the central bank's early-January about-face, when it switched its forward-looking guidance from further gradual rate hikes to an indefinite pause in the tightening cycle, policymakers have not looked back. Subsequent actions have not only affirmed the Fed's change in stance but have emphasized its accommodative tilt through two mid-cycle adjustments.

Not surprisingly, people have been paying attention and are consequently expecting more good news to come. Based on the latest readings, markets have assigned a 62% probability to prospects for another 25 basis point interest-rate cut by October and an 82.6% probability that it will occur by December; in fact, the odds of a 50 basis cut by New Year's Eve are 33.7%.

## Fed Interest Rate Hike Probability

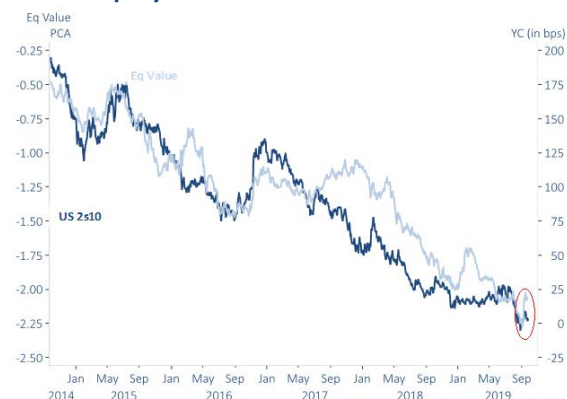


Source: Morgan Stanley

## HEDGE FUNDS

Returning to the equity markets themselves, the most prominent development in the US last quarter was the fierce sector and factor rotations that left many investors offside. In the first half, exposure to value languished at multi-year lows, leaving the S&P 500 Growth Index outpacing its value counterpart by 499 basis points through June. However, a yield curve steepening following the Fed's cuts in July and September turned things around, as can be seen below. Last quarter, the S&P 500 Value Index rose 3.1%, more than twice the 1.4% gain seen in its value counterpart, and was up 21.1% year-to-date, slightly outpacing the latter's 20.9% increase.

### Global Equity Value Performance

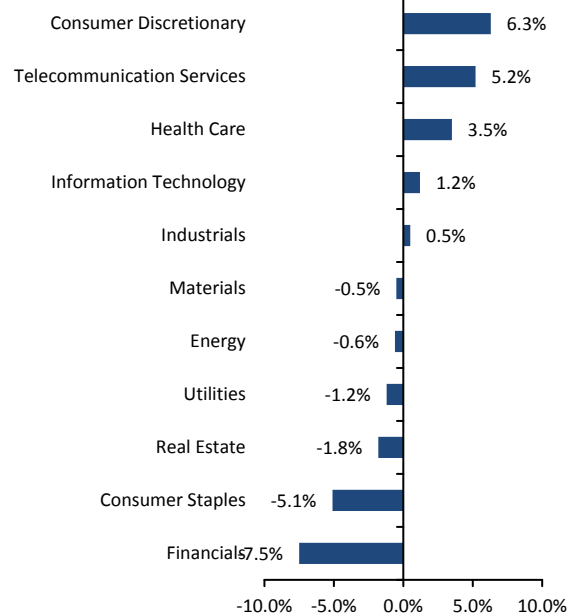


Source: Investcorp, Macrobond

Otherwise, while mid-caps turned in a solid performance in September, gaining more than 4.0% for the month, the Russell 2000 ended flat in the third quarter, with concerns over supply chain inefficiencies and trade policy uncertainty pushing investors to the sidelines. Sector rotations during the three-month span were largely correlated to movements in value; the two top performing sectors were utilities and consumer staples, up

7.98% and 4.60%, respectively, while healthcare and materials, down 0.76% and 0.03%, respectively, pulled up the rear. In terms of positioning, investors ended the period with their heaviest weighting in the consumer discretionary sector, and their lightest in financials, as indicated below.

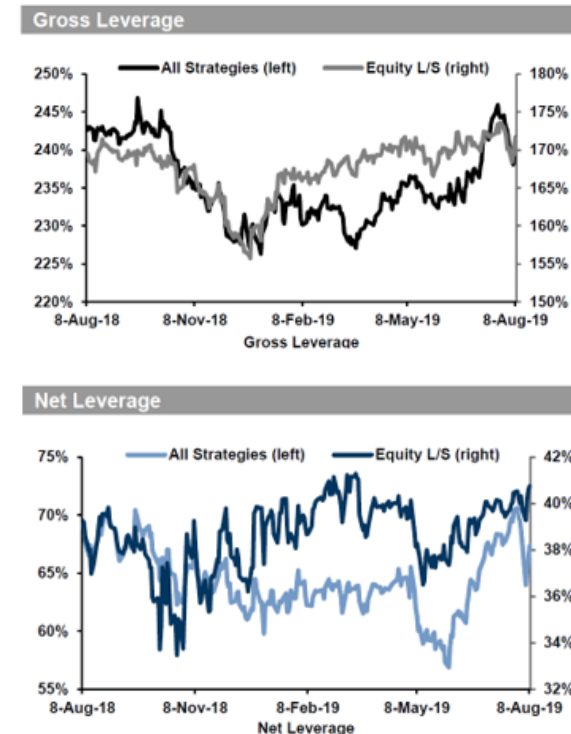
### Equity L/S Funds Relative Sector Positioning



Source: Goldman Sachs, Bloomberg

As far as the group's overall positioning goes, we have seen a large increase in equity L/S fund net exposure level since the July lows. As shown in the following charts, the measure rose from 36.5% to 40.7% over the span, bringing it close to its 12-month high of 41.3%, and leaving it comfortably above its 38.6% average for the period. In contrast, gross exposure, shown in the first chart, has not veered far from 170% since 2019 began.

### Equity L/S Funds Gross and Net Exposures



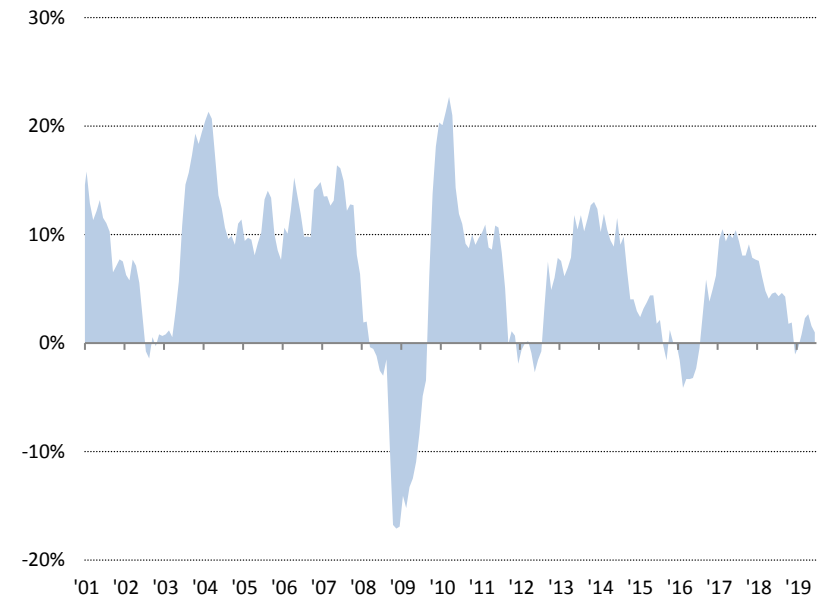
Source: Goldman Sachs

## Special Situations / Event-Driven

| Driver of Strategy Returns | Negative | Neutral | Positive | Comments                                                                                                                                                    |
|----------------------------|----------|---------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Market Beta                | ■ ■ ■    | ■       | ■ ■ ■    | Underweight beta.                                                                                                                                           |
| M&A Spreads                | ■ ■ ■    | ■       | ■ ■ ■    | Spreads have widened meaningfully and now trade above what equity volatility and investment grade credit spreads would suggest.                             |
| Corporate Activity         | ■ ■ ■    | ■       | ■ ■ ■    | Greater political uncertainty and higher cost of capital likely to dampen large corporate activity.                                                         |
| Activism                   | ■ ■ ■    | ■       | ■ ■ ■    | Activism continues to benefit from their sector and factor positioning, with also increasing security selection alpha in a less crowded market environment. |
| Tax                        | ■ ■ ■    | ■       | ■ ■ ■    | Limited catalysts.                                                                                                                                          |
| Crowdedness                | ■ ■ ■    | ■       | ■ ■ ■    | Lower levels of crowding in special situations portfolios.                                                                                                  |

Median 12-Month Rolling Returns<sup>1</sup>

## Event Driven Strategy



Median returns are those of Investcorp's strategy peer group. Strategy peer groups are created by Investcorp and are comprised of funds that Investcorp has judged to be relevant for each strategy.

Source: PerTrac, S&P Capital IQ, Investcorp

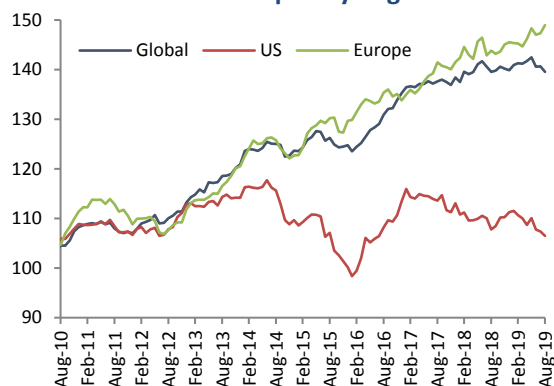
## HEDGE FUNDS

### Special Situations / Event-Driven

Global event-driven hedge funds lost a net 1.61% in the July-August period, according to Eurekahedge, with special situations strategies leading the way, based on data from HFRI. Eurekahedge indices also indicate that US-focused funds, down 1.46%, underperformed European-oriented counterparts, up 0.85%. Emerging market funds, hurt by the burgeoning Argentinian debt crisis, were the outlier, dropping a hefty 8.37% over the span.

More broadly, HFR data reveals that event-driven managers lagged the HFRI Global Hedge Fund Index over last quarter's first two months, losing 0.88% versus a modest 0.17% gain in the aggregate benchmark. As noted above, special situations funds fared poorly, shedding 1.31% from July through August, in contrast to the 0.69% gain posted by merger arbitrage counterparts. Otherwise, as indicated below, event-driven alpha has fallen in recent months, most notably in the US, though it remains on an upward tack in Europe.

#### Event-Driven Funds – Alpha by Region



Source: Bloomberg, Investcorp

### Outlook on Event-Driven Opportunity Set

Despite the sharp upswing in equities, we continue to believe we are in a late-cycle economic recovery, leaving us unwilling to reconsider our neutral stance on the event-driven opportunity set. In our view, heightened uncertainty stemming from US-China trade frictions and managers' crowded exposure to momentum and growth represent considerable headwinds for the strategy going forward. That said, it may make sense to add tactically to merger arbitrage allocations during market dislocations.

Another measure that suggests that now is not the time to up the ante relates to the share-price performance of firms that are generally at the forefront of increased M&A activity. As the following chart illustrates, a gauge of investment banking advisory stocks relative to the broader market – a proxy for corporate activity – has remained in a steep, record-setting decline since last December. So far, at least, there are no signs of stabilization.

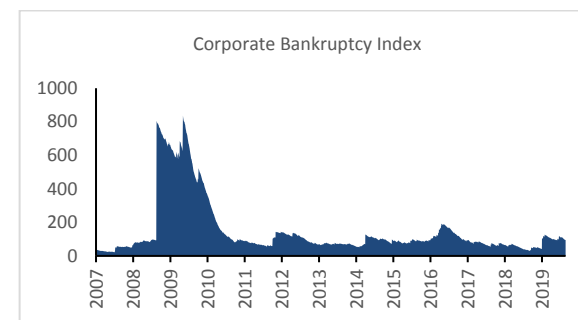
#### Average Performance of Rothschild, Lazard, Moelis and Evercore Shares vs. S&P 500



Source: Bloomberg, Investcorp

Elsewhere, the growth in corporate debt levels is a development that should be closely monitored and a risk worth thinking about. Buoyed by a burgeoning leveraged loan market and historically low levels of bankruptcy – illustrated below – the aggregate value of issues outstanding has increased sharply. However, despite a relative paucity of corporate failures, we are mindful of a late-cycle deterioration in fundamentals and a consequent rise in potential defaults, which could weigh on the segment's beta-driven returns. Moreover, keep in mind that while bankruptcies are light in historical terms, the Bloomberg benchmark has witnessed a notable pick-up since 2019 started.

#### US Bankruptcies Historical Volume



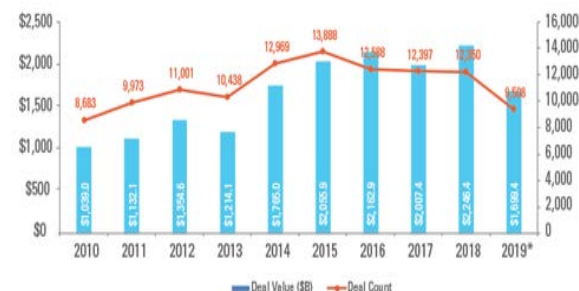
Source: Bloomberg

However, rising debt-related turbulence could also serve to expand and enhance the strategy's forward-looking opportunity-set, owing mainly to increases in reorganization- and inorganic-growth-driven corporate activity. Given the drop-off to all-time lows in post re-org equity turnover, some might say there is no way for this measure to go but up as the economic cycle matures.

**Merger arbitrage** hedge funds have tacked on a net 4.44% so far this year, according to HFRI, compounding 2019's 3.29% gain. Even so, this group has been one of the strategy's worst performers, trailing the 5.62% rally in the Event-Driven (Total) Index over the span. Against the backdrop of rising nationalism and protectionism, heightened trade uncertainty, and various geopolitical developments, including the potential for a no-deal Brexit, conditions have been less-than-supportive. In addition, corporate transactions involving technology and infrastructure have come under increased scrutiny, especially when they require both US and Chinese approval. In our view, the headwinds facing such deals will likely continue, affirming our neutral stance.

It does not help, of course, that North American merger and acquisition volumes are on track for their biggest decline in a decade, down from 12,350 in 2018 to an estimated 9,508 by the end of this year. While the first quarter did see a modest pickup in activity, escalating trade tensions and the Brexit impasse have pushed many corporate decision-makers to the sidelines as they await further clarity. To be sure, corporate activity will likely increase sharply if these issues are resolved, especially in the UK, where the currency has fallen by approximately 15% versus the dollar since June 2016, potentially making British assets more attractive to foreign buyers.

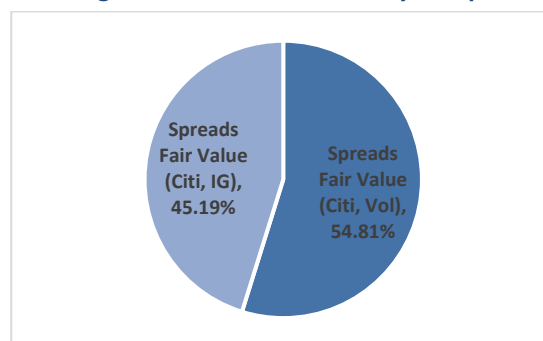
### North American M&A Values



Source: Pitchbook

As far as the constituent drivers go, the cheapness in merger spreads, which has recently been driven by upswings in equity volatility, reflects a turnabout from what we saw in prior periods. This time around, the jump in the VIX index, from 15.08 to 18.98, or 25%, was not accompanied by a comparable move higher in the investment grade credit spread, which rose from 2.0% to 2.3%, an 11.5% increase.

### Breaking Down the Value Metric by Component

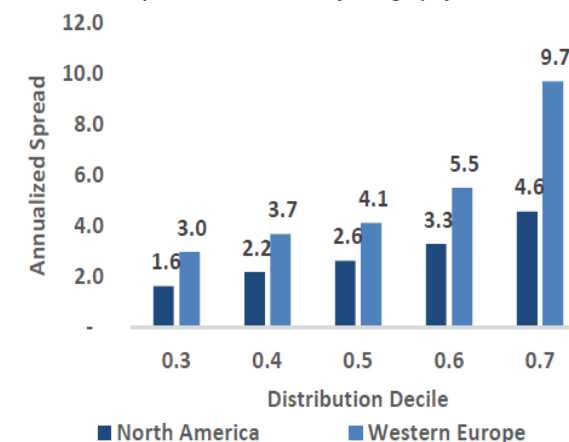


Source: Bloomberg, Investcorp

In our view, heightened volatility can unearth interesting opportunities; tactically adding to the merger arbitrage strategy may be beneficial at such times. Moreover, while we are cautious overall, we do see some areas of opportunity when looking at things in more regional terms. Western Europe, for example, with spreads of 5.5% on an annualized basis, as shown below in the first chart, looks more attractive than the US, where returns are closer to the 3% mark. Keep in mind, however, that the deal universe in Europe, at 11%, remains small in comparison to this side of the Atlantic, where the tally is 89%, as the second chart illustrates.

### North America vs. Western Europe Annualized Spreads

#### Annualized Spreads Distribution by Geography

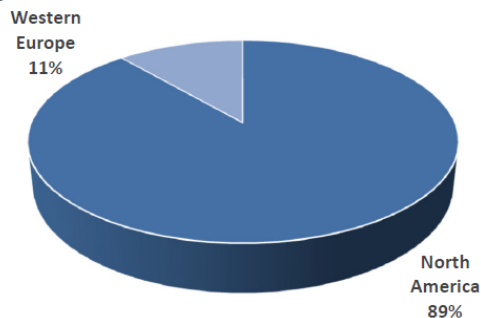


Source: Bloomberg, Investcorp, Macrobond

## HEDGE FUNDS

### Merger Arbitrage Deal Universe – Geographic Breakdown

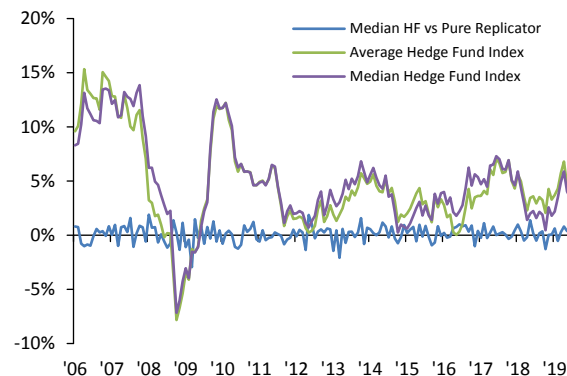
#### Regional Breakdown



Source: Bloomberg, Investcorp, Macrobond

Finally, in assessing our outlook for the strategy, we also take account of how it is implemented. At the end of 2018, for instance, hedge funds lagged the pure replicators on a 12-month rolling basis; during the first half of this year, however, active managers were at the forefront. Since then, the performance of the latter group has fallen back into line with the indexers. In some respects, this reflects current realities: returns remain somewhat limited, largely because those opportunities deemed relatively “safe” have meager spreads, while those that have more to offer are tied to cross-border deals that are often fraught with regulatory or other risks.

### 12-Month Rolling Performance Hedge Funds vs. Replicators



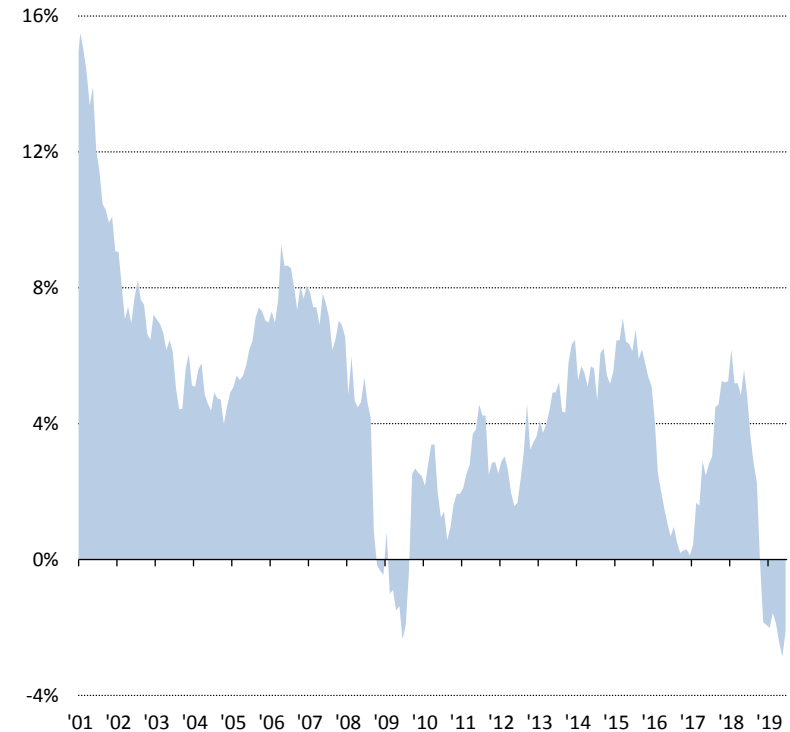
Source: Bloomberg, Investcorp, Macrobond

## Equity Market Neutral

| Driver of Strategy Returns | Negative | Neutral | Positive | Comments                                                                                                                                                                                                     |
|----------------------------|----------|---------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dispersion</b>          | ■ ■ ■    | ■       | ■ ■ ■    | Volatility-neutralized dispersion trading remains significant. Sector rotation is the primary driver amid equity market bifurcation stemming from new macro trends and changing government policies.         |
| <b>Valuations</b>          | ■ ■ ■    | ■       | ■ ■ ■    | Defensive factor valuations are unattractive, though they are not at historical extremes.                                                                                                                    |
| <b>Capital</b>             | ■ ■ ■    | ■       | ■ ■ ■    | Capital allocated to the strategy has declined; returns have not kept pace with long-biased equity counterparts and prop trading desks have exited.                                                          |
| <b>Liquidity</b>           | ■ ■ ■    | ■       | ■ ■ ■    | Liquidity is not an issue with respect to large and midcap developed market names. In small-cap and emerging markets, however, turnover constraints remain key to exploiting attractive alpha opportunities. |
| <b>Financing</b>           | ■ ■ ■    | ■       | ■ ■ ■    | Higher short-term deposit rates enhance the attractiveness of cash collateral, but it is offset by higher prime broker financing costs.                                                                      |

Median 12-Month Rolling Returns

## Equity Market Neutral Strategy



Median returns are those of Investcorp's strategy peer group. Strategy peer groups are created by Investcorp and are comprised of funds that Investcorp has judged to be relevant for each strategy.

Source: PerTrac, Investcorp



## HEDGE FUNDS

### Equity Market Neutral

Equity market neutral hedge fund returns were mixed in the July-August period. The HFRI EMN Index was up 1.63% and the HFRX EMN index was down 1.9%, while the S&P 500 posted a decent gain. Despite more subdued month-to-month swings in performance than during the second quarter, implied volatility remained elevated, with the VIX index ranging from 15 to 25, higher than in the April-June span.

The last three months have also witnessed whip-saws in certain popular equity factors, which have undermined performance. Not surprisingly, factor quant funds have borne the brunt of the reversals, but statistical arbitrage strategies have also suffered recently despite being positioned, in theory, to better navigate a choppy environment. More broadly, across the group of mostly global quant equity funds we monitor, performance last quarter was flat to down, with gains in July being partly offset by losses in August and a bad start to September. While stat arb funds held up well earlier in the period, they were also hurt by the violent factor rotations that occurred in early September.

In the factor space, momentum and low beta staged a multi-standard-deviation sell-off, while value witnessed a brief but powerful resurgence following a brutal August for most value-oriented managers. Leading up to September, investors had favored low beta stocks and large caps over their small cap counterparts, and the momentum factor fell into line with this broader trend.

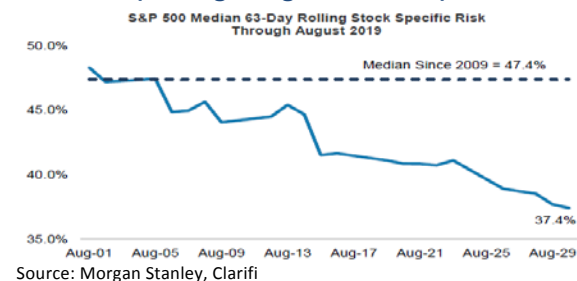
Otherwise, the sudden rise in bond yields in September turned out to be highly correlated with

the reversal in defensive low beta and growth stocks. As we have noted on several occasions, the popularity of the respective factors has coincided with strength in momentum, so we were not surprised to see the turnabouts that occurred. That said, we found the magnitude of the spillover from the factor space to alpha-oriented quant funds to be noteworthy; it also served to confirm the increasing convergence between risk premia and alpha that has evolved through the years.

For the year to date, several of the funds we track are in the midst of their worst five-year draw-downs since inception, hurt in particular by their North American exposure, which for many global equity funds is typically the largest. Those with dedicated exposures to Asia and Europe, meanwhile, have navigated the environment somewhat better. In terms of style, managers with heightened exposure to value factors were among the worst performers in August, though they experienced something of a pick-up in early-September.

As in the prior period, activity last quarter remained macro driven, dominated by US-China trade frictions and movements in interest rates. Major central banks around the world grew increasingly dovish amid weaker economic data and the Federal Reserve's shift to a more accommodative stance. Not surprisingly, macro-related uncertainty manifested as low stock-specific risk, which we characterize as the percentage of stock volatility that is not explained by traditional factors; as illustrated in the following chart, this measure is 10% below its median since 2009.

### Top 500: Stock-Specific Risk, Rolling 63-Day Windows (Through August 30, 2019)

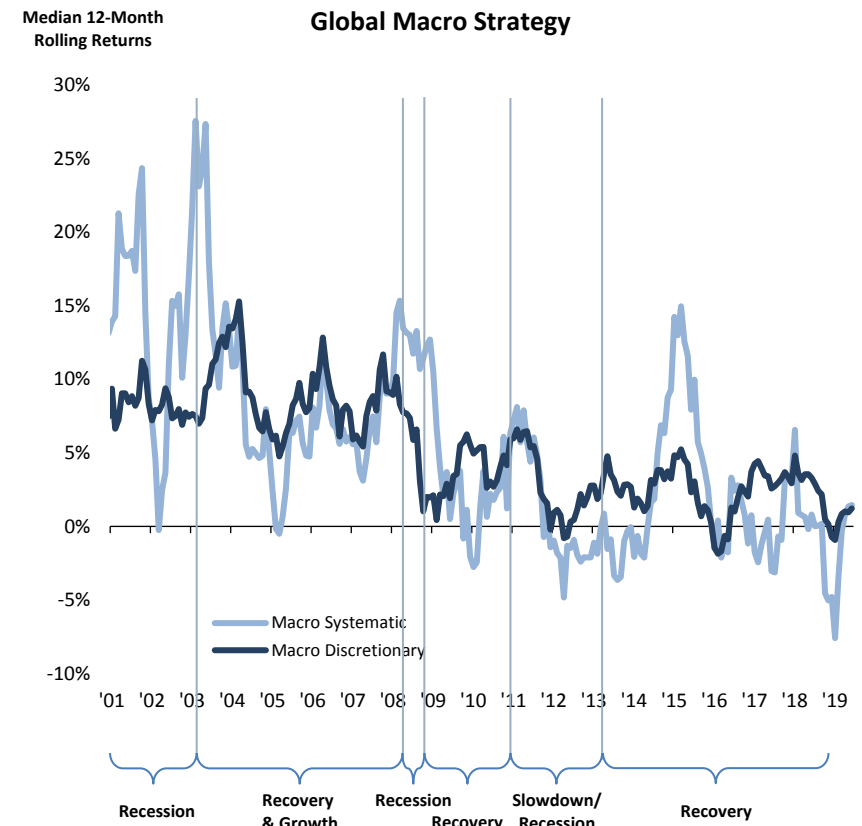


From a top-down perspective, market neutral equity fund positioning tends to serve the group fairly well during moderately volatile downtrends, but recent market action has been less-than-supportive. In part, this reflects perceptions that an escalating trade war is bad news for the economy and, as a consequence, sets the stage for easier monetary policy, which investors see as a positive for equities.

Despite the group's lackluster showing last quarter, we are encouraged by the lack of liquidation pressures emanating from crowded trades. In contrast to what we saw following 2018's turbulent fourth quarter, many funds have been able to claw back performance quickly following the factor reversals that occurred in early-September. In light of this, we are looking to maintain exposure to the strategy rather than shy away, though as was the case previously, we favor regionally diversified multi-strategy funds operating over multiple alpha investment horizons. Generally speaking, managers employing this approach have proved adept at navigating varying combinations of heightened market volatility, turbulent macro headwinds, and sharp factor reversals over the last 18 months.

## Global Macro

| Driver of Strategy Returns | Negative | Neutral | Positive | Comments                                                                                                                                                                 |
|----------------------------|----------|---------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fundamentals</b>        | ■ ■ ■    | ■       | ■ ■ ■    | Growth and inflation upturns proceeding at different speeds across regions, offers opportunities for differentiations across interest rate and foreign exchange markets. |
| <b>Trends</b>              | ■ ■ ■    | ■       | ■ ■ ■    | Potential for trends in interest rates and foreign exchange.                                                                                                             |
| <b>Correlation</b>         | ■ ■ ■    | ■       | ■ ■ ■    | Slightly lower diversification in rates but foreign exchange and commodities still offer a good playing field.                                                           |
| <b>Volatility</b>          | ■ ■ ■    | ■       | ■ ■ ■    | Higher market volatility is opening up opportunities for trading and rewarding smart use of option structures.                                                           |
| <b>Crowding</b>            | ■ ■ ■    | ■       | ■ ■ ■    | Limited risk of crowding in macro themes today (outside of perhaps long oil).                                                                                            |



Median returns are those of Investcorp's strategy peer group.

Strategy peer groups are created by Investcorp and are comprised of funds that Investcorp has judged to be relevant for each strategy.

Source: PerTrac, Investcorp

## HEDGE FUNDS

### Global Macro

#### Macro Discretionary

Discretionary global macro funds gained a net 4.6% in the July-August period and were up 9.8% over the year's first eight months, according to HFRI indices. At this juncture, the group is witnessing one of its strongest years in some time, and together with the macro systematic strategy, it is among the best performers in 2019. For the period ahead, we remain positive on the strategy, giving it our most overweight ranking.

We believe some segments are more appealing than others. To begin with, we favor allocating to a diverse portfolio of macro managers with exposure to a broad range of policy divergence themes, but with an increasing tilt toward more traditional FI, rates and FX managers. We also believe there are significant opportunities in the emerging markets complex, though we recommend managers that can be tactical, trade relative value opportunities, and avoid the more illiquid areas (e.g., single CUSIP corporate credits) at this stage of the economic cycle. As we note in our review of the macro universe, manager selection – as always – remains key in light of the significant performance dispersion we have seen among our defined sub-strategy groupings.

In our view, the opportunity set for discretionary macro managers remains broadly attractive. So far, we have seen solid performance across all the sub-strategies we track, with the strongest showing coming from the emerging market and diversified categories. Going forward, however, we expect that returns from the former will vary based on the degree of individual manager exposure to Argentina, which, as we discuss, has been wracked

by an unexpected political development. Otherwise, many diversified and classic fixed-income and FX specialists have succeeded in catching the move in duration this year, as well as the broad rallies in equities and credit.

However, some EM managers have been less fortunate. Following the surprise win by Alberto Fernandez in Argentina's August primary elections, risk assets tanked, catching many investors off guard. The peso fell 26% – as can be seen in the first chart below – CDS on Argentine sovereign debt blew out to more than 4,000 basis points, and government bonds sold off sharply, as the second chart illustrates. At this point, EM manager opinions regarding the quality of the opportunity set that currently exists vary considerably, especially in regard to fixed-income. They range from extreme caution, with some arguing that the country's risk assets have become "uninvestable," to considerable excitement about the compelling values now on offer.

#### Argentina FX



Source: Investcorp, Macrobond

#### Argentina Fixed Income



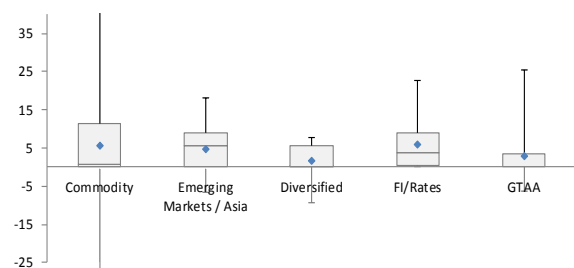
Source: Investcorp, Macrobond

With respect to Argentine fixed-income exposure, in particular, we would err on the side of caution at this point. From where we sit, the country appears headed toward a potential restructuring of its outstanding obligations through a "voluntary reprofiling" of longer-term debt and a delayed repayment of IMF loans. Regardless, we would note that the entire episode should serve as a strong reminder that while opportunities in the EM space can be significant, the risk of abrupt and severe reversals of fortune is always there. Consequently, overall portfolio liquidity and sizing should be at the top of investors' minds.

Digging more deeply into underlying performance, we have found some interesting variations among the top 50 global macro discretionary hedge funds over the last 12 months. Typically, we segment the universe into five sub-strategies: FI/rates/FX, commodity, emerging markets/Asia, diversified and GTAA. As the following chart shows, the performance of the emerging markets/Asia and fixed-income segments has been the most consistent and had the least dispersion – based on

inter-quartile ranges – which is in line with where we would want to tactically allocate to the strategy – as well as underscoring our earlier point about choosing the right managers.

#### Investcorp Macro Discretionary Select Universe



Source: Investcorp

As far as the broader backdrop goes, growing calls for the impeachment of President Trump and continuing trade uncertainty will probably continue to be noise for now, overshadowed by two key drivers – namely, Federal Reserve policy and concerns about growth in China and any reaction by government policymakers. Looking ahead, markets will likely become more focused on Elizabeth Warren’s campaign to be the Democratic candidate for US president in the 2020 elections. Should her odds of winning increase, risk assets will likely come under growing pressure.

Regardless, we believe the optimal macro discretionary playbook for 2019 centers on the following managers, sectors and trades:

- Managers with cross-asset expertise that can successfully navigate equity and credit indices in addition to pure FX and interest rate exposure.
- Emerging markets specialists that have been able to play, inter alia, Latin America and EMEA, and which have also demonstrated an ability to tactically hedge during periodic sell-offs in carry-based strategies.
- Managers that can readily switch into relative value rate trading strategies, including the classic cash-futures basis.
- Managers that can play both relative value and directional plays in delta one and volatility across the commodity complex – which has been difficult to trade in recent years – where sectors such as metals are beginning to look potentially interesting.
- Idiosyncratic trades such as option structures that are designed to play mispriced event risk and central bank policy missteps.

## HEDGE FUNDS

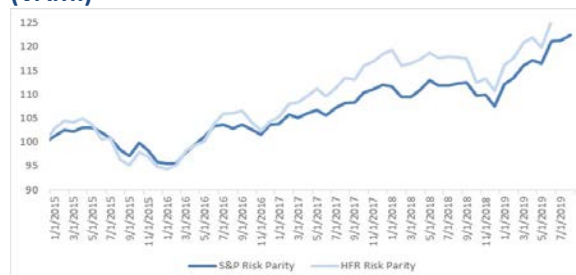
### Macro Systematic

Macro systematic strategies returned a net 11.0% in the July-August period and gained 18.2% over the year's first eight months, based on the HFRI Macro Systematic index. The group was up 7.1% and 12.2% over the same periods, respectively, according to the Société Générale CTA index. However, indications are that poor performance in September took a cut out of those results.

More broadly, we see little change in the conditions that prevailed at the time of our last update, leading us to maintain a neutral stance. Owing to current range-bound trends, diminished prospects for a big move in interest rates, and periodic crowded short positioning, we favor allocating to a diversified cluster of multi-quant, short-term CTAs and medium-term CTAs, though with an underweight exposure to the latter segment.

Regardless, despite the September haircut, macro systematic funds have had their best run of performance in 10 years; based on the 19.96% year-to-date rise in the SG Trend Index, pure trend managers have been the standouts. This group fared particularly well in July and August, bolstered by the rally in bonds and, in some cases, net long exposure to rising global share prices. Strength in fixed-income and equities have also been a boon for risk parity funds, which have posted their strongest returns in more than a decade. The HFR 10% Volatility Risk Parity Index, illustrated in the following chart, is up 15.1% through August, its best showing ever.

**S&P & HFR 10% Volatility Risk Parity Indices (VAMI)**



Source: Bloomberg

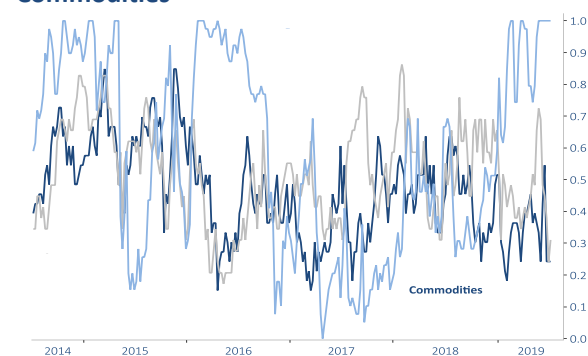
Still, while certain segments and the group overall have fared very well so far this year, a more granular assessment reveals some notable variations. To better understand what is working well and what is not, we segment the top 50 global macro systematic managers into five subcategories: alternative trend, diversified, pure trend, quantitative macro, and short term. Below is an overview of how each has fared over the past 12 months:

- **Alternative Trend** – This segment, which includes managers trading instruments – ETFs, OTC credit, interest-rate swaps, and cash equities – that are more esoteric than the liquid futures contracts employed in standard trend models, remains among the strategy's best performers, posting an average return of 4%.
- **Diversified** – Comprised of managers operating with a mix of short and medium-term trend and countertrend models, this subcategory generated an average gain of 20%.
- **Pure trend** – Managers in this subcategory produced returns that are clustered around a 5-9% average, roughly in line with the broader benchmark.

- **Quantitative Macro** – With exposure to multiple quantitative alpha streams across cash equity style factors, volatility, trend, cross asset and GTAA-type models, among others, funds in this segment posted an average return of 4%.
- **Short Term** – This group, which tends to have the lowest Sharpe ratios, witnessed the highest level of dispersion; while the overall average was a loss of 2%, individual managers generated returns ranging from a high of +40% to a low of -30%.

When evaluating managers' forward-looking opportunity sets, one series we monitor are our internal "trend exhaustion" indicators, which are derived from three separate short-to-medium-term look-back periods across asset classes. As suggested by the chart below, rates have been the clear driver this year as far as trends are concerned, while the impetus in FX has been more episodic. In commodities, meanwhile, there have been limited instances of clear-cut trends.

**Percentage of Asset Trending – Rates, FX and Commodities**

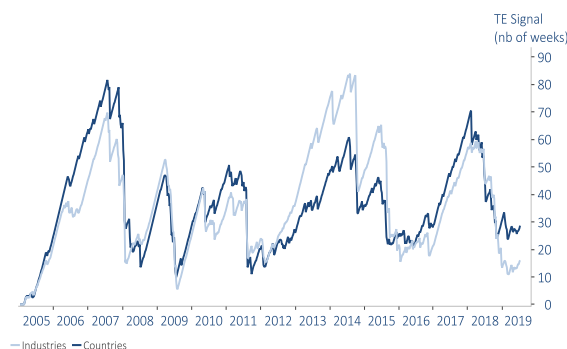


Source: Investcorp, Macrobond

With respect to global equities, recent trends have been somewhat subdued, though that has not necessarily been the case in certain countries and sectors. One major headwind has been the periodic onset of V-shaped moves, which have made it difficult for models to gain traction. As can be seen in the first chart, the only meaningful indication of trend we have seen in recent times occurred in mid-2018, which was followed by an abrupt about-face and a shift toward the current modest net length. An analysis of the rolling beta of the equity trend gauge versus to the S&P 500, detailed in the second chart, tells a similar story.

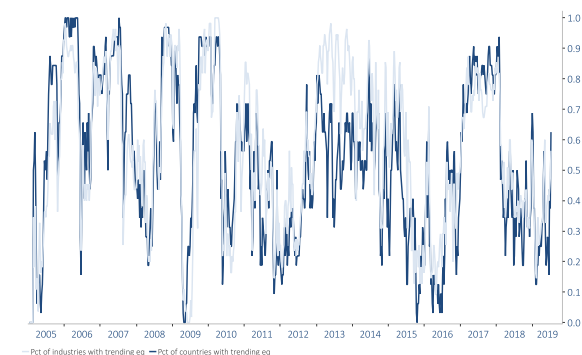
As noted above, commodities overall have not given managers a lot to work with, as suggested by the first chart, but we have seen tradable trends in the energy segment, among some others. As the second chart shows, speculative long positioning in crude oil futures continued to rise sharply last quarter, in tandem with the renewed run-up in prices following the bombing of a number of Saudi Arabian oil fields.

### Investcorp Trend Exhaustion Indicator – Global Equity Indices

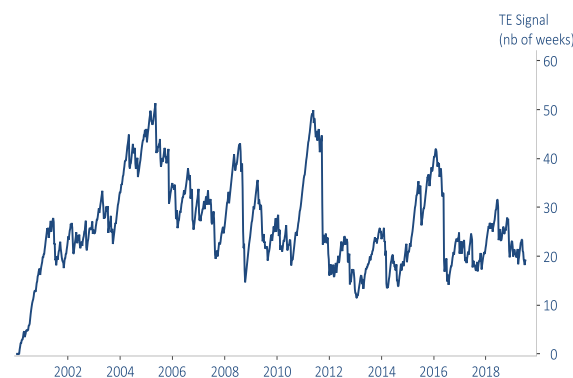


Source: Investcorp, Macrobond

### Percentage of Asset Trending - Equity

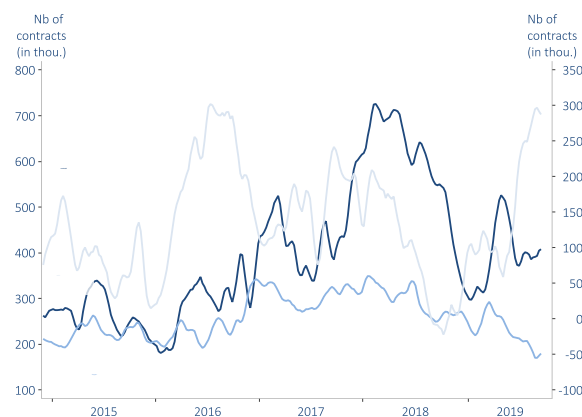


### Investcorp Trend Exhaustion Indicator – Commodities



Source: Investcorp, Macrobond

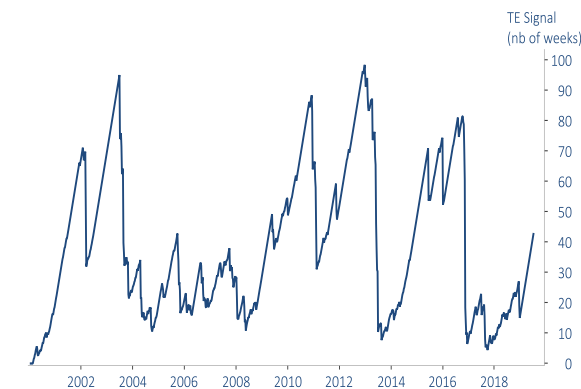
### Net Speculative Positioning in Commodity



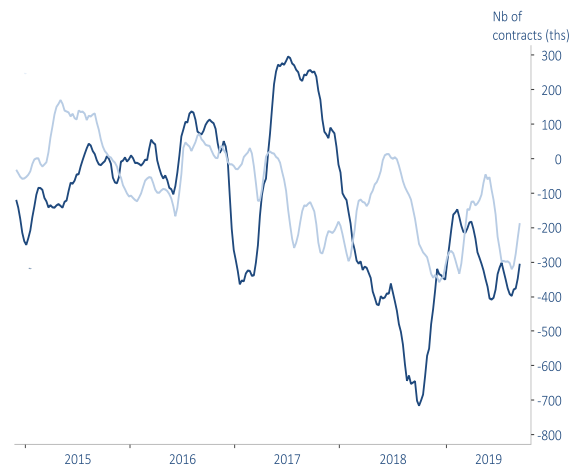
## HEDGE FUNDS

In the fixed-income arena, meanwhile, it has been a case of “all systems go,” with its trend exhaustion indicator – illustrated in the first chart below – exhibiting the strongest signal of any in the group. Given the extent of the rally we have seen in bond markets so far, it is no surprise that many medium-term trend managers have caught the move, and that speculative net long exposure has largely followed suit, as the second chart indicates.

### Investcorp Trend Exhaustion Indicator – Fixed Income



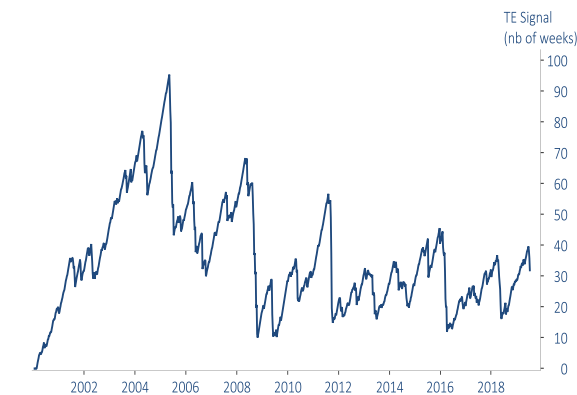
### Net Speculative Positioning in Fixed-Income



Source: Investcorp, Macrobond

Finally, as far as FX is concerned, its trend exhaustion indicator has more-or-less tracked the steady uptrend in the US dollar since the beginning of 2018.

### Investcorp Trend Exhaustion Indicator – Foreign Exchange



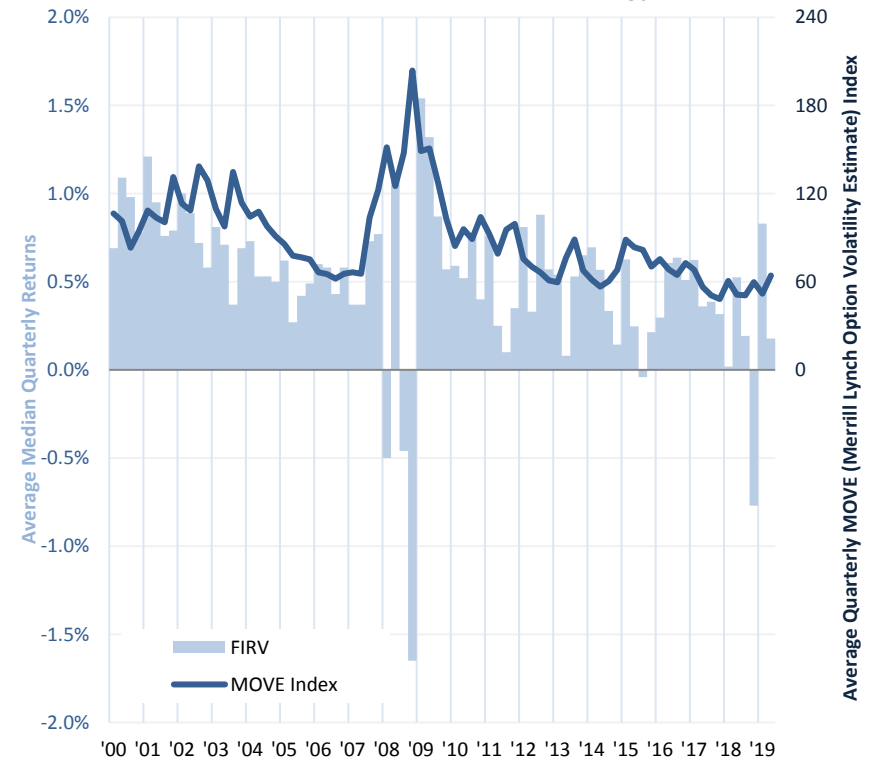
Source: Investcorp



## Fixed Income Relative Value

| Driver of Strategy Returns | Negative | Neutral | Positive | Comments                                                                                                                                                                                    |
|----------------------------|----------|---------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Opportunity Set</b>     | ■ ■ ■    | ■       | ■ ■ ■    | Heightened volatility in rates and flows sets the stage for curve micro-dislocations that relative value managers can capitalize on.                                                        |
| <b>Macro Fundamentals</b>  | ■ ■ ■    | ■       | ■ ■ ■    | Macro trends continue to be supportive; event risks can instigate capital flows that lead to RV opportunities.                                                                              |
| <b>Capital</b>             | ■ ■ ■    | ■       | ■ ■ ■    | Capital pursuing the strategy remains limited in comparison to history amid an absence of proprietary trading and significantly lower leverage ratios.                                      |
| <b>Liquidity</b>           | ■ ■ ■    | ■       | ■ ■ ■    | In the Dodd-Frank regulatory era, liquidity can prove ephemeral, even in markets where such risk has historically been seen as negligible – as we learned during the October 2014 sell-off. |
| <b>Financing</b>           | ■ ■ ■    | ■       | ■ ■ ■    | Balance sheet scarcity is limiting funds' ability to deploy the full range of strategies.                                                                                                   |

## Fixed Income Relative Value Strategy



Median returns are those of Investcorp's strategy peer group. Strategy peer groups are created by Investcorp and are comprised of funds that Investcorp has judged to be relevant for each strategy.

Source: Investcorp, Bloomberg

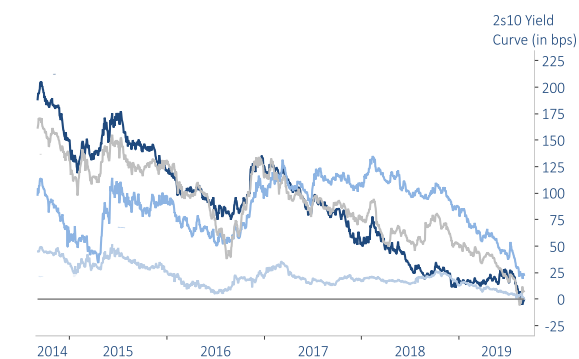
## HEDGE FUNDS

### Fixed Income Relative Value

Fixed-income relative value funds that we track generated positive returns last quarter and have been in the black every month this year. Among the standout performers are balance-sheet-focused managers, several of which posted gains through August in the mid-to-high single digits and also boasted strong trailing 12-month returns.

More broadly, we saw a number of interesting developments take shape in recent months that will likely have profound implications for fixed-income relative value traders in the months ahead. Among other things, bond markets continued rallying amid escalating US-China trade tensions, disappointing economic data, and the Federal Reserve's shift to a more accommodative stance. At the same time, the European Central Bank kept rates on hold but hinted strongly about increased monetary stimulus to come. Taken together, these developments pressured yield curves across the globe, as can be seen in the following chart; they also triggered a brief inversion of the two-year/10-year US Treasury curve – often seen as an indicator of impending recession – as well as a further grind lower in long-term yields.

### 2s10 Yield Curve



Source: Investcorp, Macrobond

In addition, conditions grew choppy and more challenging as the quarter wore on. Coming into September, we saw a sharp uptick in yields on the heels of better-than-expected economic data and indications that FOMC members were split regarding the extent of future rate cuts, which resonated both within and outside of fixed-income markets. Separately, one situation that RV funds have been able to capitalize on relates to speculative positioning by macro players, which have largely been long through futures and swaps, as can be inferred from the chart following. This set-up has given managers with balance sheet capabilities an attractive opportunity to buy cash bonds using repo financing and hold them against short futures positions and their subsequent settlement.

### Speculative Positioning in Bond Futures

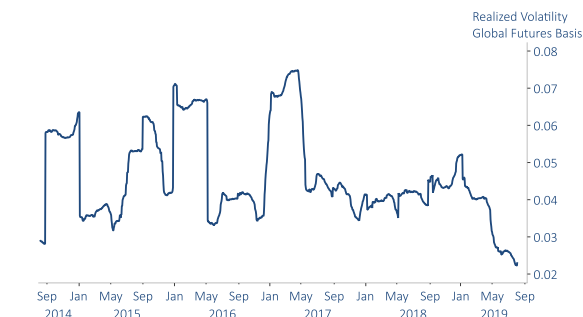


Source: Investcorp, Macrobond

Otherwise, the early-September change in perceptions also saw general collateral repo rates spike and significantly overshoot the upper end of the targeted fed funds range, heightening volatility in basis trades, as suggested in the following chart. As of now, there is no real clarity about what triggered the sudden cash funding crisis, which saw

the US central bank step into repo markets and provide collateralized funding for the first time since the global financial crisis ended a decade ago.

### Futures Basis



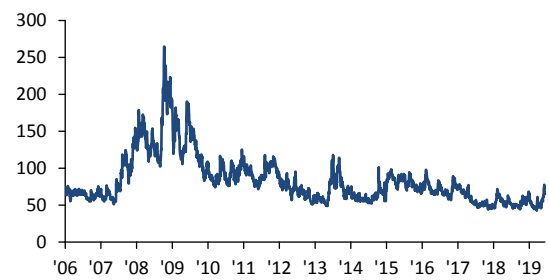
Source: Investcorp, Macrobond

Following the Fed's intervention, general collateral rates have come down, though speculation continues about the causes of the crunch. So far, the debate has centered on four factors: a jump in lever-aged RV fund repo funding demand, an increased call for cash from corporates seeking to cover tax-related obligations, pressures emanating from the Fed's shrinking balance sheet, and increased US Treasury issuance. Regardless, it is a good bet that the normalization of GC rates has further benefited funds with the wherewithal to make the most of related RV opportunities.

Finally, it is worth pointing out that the Fed's shift in favor of greater accommodation and a re-expansion of its balance sheet to bolster banking system reserves could temper volatility in fixed-income markets. As a result, this could put a halt to the nascent upswing in the MOVE index, high-lighted in the following chart, and have significant implications for managers who target volatility trades in this asset class.

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### Fixed-Income Implied Volatility Index (MOVE)



Source: Bloomberg, Investcorp

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## HEDGE FUNDS

### Corporate Credit

| Driver of Strategy Returns | Negative | Neutral | Positive | Comments                                                                                                                       |
|----------------------------|----------|---------|----------|--------------------------------------------------------------------------------------------------------------------------------|
| Valuation                  | ■ ■ ■ ■  | ■       | ■ ■ ■ ■  | Credit spreads offer limited room for tightening at current levels                                                             |
| Carry                      | ■ ■ ■ ■  | ■       | ■ ■ ■ ■  | Carry is back on line with pre-sell-off levels.                                                                                |
| Credit Spreads             | ■ ■ ■ ■  | ■ ■ ■ ■ | ■ ■ ■ ■  | Credit spreads should remain stable or widen slightly from current levels.                                                     |
| Duration                   | ■ ■ ■ ■  | ■ ■ ■ ■ | ■ ■ ■ ■  | US yields likely to stay range-bound – little impact for credit.                                                               |
| Dispersion                 | ■ ■ ■ ■  | ■       | ■ ■ ■ ■  | There is some dispersion, but it is difficult for managers to capture under current liquidity conditions.                      |
| Defaults                   | ■ ■ ■ ■  | ■       | ■ ■ ■ ■  | Defaults should remain low, though there will likely be some pick-up in energy-related sectors.                                |
| Liquidity                  | ■ ■ ■ ■  | ■       | ■ ■ ■ ■  | Liquidity is challenged: broker-dealers hold structurally lower inventories following regulatory curbs on proprietary trading. |

Distressed Ratio & Bond Yield



Median returns are those of Investcorp's strategy peer group. Strategy peer groups are created by Investcorp and are comprised of funds that Investcorp has judged to be relevant for each strategy.

Source: Investcorp, Bloomberg

## Corporate Credit and Distressed

High yield credit gained 1.59% in the third quarter through September 20, according to the BAML US High Yield Master II Total Return Index. At the same time, high yield option-adjusted spreads fell from 407 basis points to 381 basis points, a decline of 26 basis points, while the spread on CCC-rated corporate debt remains near the bottom of its long-term range, as shown below. In the July-August period, corporate credit-focused hedge funds posted a return of 0.15%, based on the HFRI RV: Fixed Income-Corporate Index.

### Historical Credit Spread – CCC-rated Corporate Debt



Source: JP Morgan

In the 12 months through September 20, the BAML HY index climbed 6.44%, while the HFRI rose 3.91% over a similar span through August 31, owing largely to unaggressive positioning among managers. As has been the case previously, corporate credit focused hedge funds maintained average net exposures ranging from approximately 50% to 65%, which is in line with their beta-adjusted performance relative to the benchmark. This level of positioning has made it difficult for them to fully capitalize on the snapback rally that kicked off the year.

In light of the above, it is apparent that the group did not generate any real alpha net of fees, a recurring issue to which we have long made reference. For one thing, the long/short high yield strategy remains challenged by generally low yields – the average was just 5.52% as of September 20 – that have left little room for further spread compression. Meanwhile, a relative paucity of defaults has limited the scope for spread widening, which would benefit short positions.

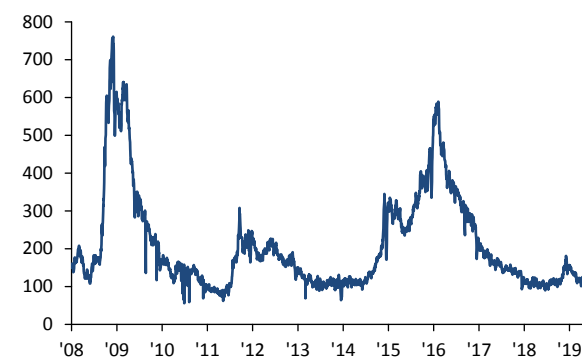
But while hedge fund managers have struggled to identify attractive opportunities and generate out-sized performance, there is good reason to believe that this is not necessarily a sign that credit markets are poised for a significant downturn. Of the four key elements we monitor to assess conditions in the space – default rates, recovery rates, new issue terms, and market liquidity – the first three remain in favorable territory, while the last is not (yet) raising alarm bells. Below is an overview of where these indicators currently stand:

- Default rates – low and below average
- Recovery rates – high and above average on actual defaults
- Yields and spreads investors require from issuers – low and below average
- Market liquidity – high enough for the riskiest credits to issue considerable debt at low yields

In terms of default rates, the measure was 1.1% at the end of June. This stands in contrast to data from E. Altman and B. Kuehne, published by the NYU Salomon Center for the Study of Financial Institutions, that shows the weighted-average

dollar-denominated high-yield bond default rate from 1971 to 2018 was 3.27%, with a standard deviation of 3.1%. On a related note, the number of distressed issuers also remains limited, as illustrated in the following chart.

### Number of Distressed Issuers



Source: TRACE, Bloomberg

The story is similar with respect to recovery rates – the weighted-average prices of defaulted bonds just after default – which were at 48.8% in June and 52.1% in 2018. These readings are significantly above the 39% high-yield corporate bond average.

Spreads, meanwhile, remain at the lower end of their historical spectrum. As noted earlier, the HY OAS index was trading at 381 basis points in late-September.

In terms of market liquidity, this element tends to be the most volatile and difficult to forecast. That said, CCC-rated bond issuance as a percentage of the overall high-yield total can serve as a useful barometer, effectively representing the market's acceptance of the lowest-quality bonds. This is especially true when interest rates are relatively

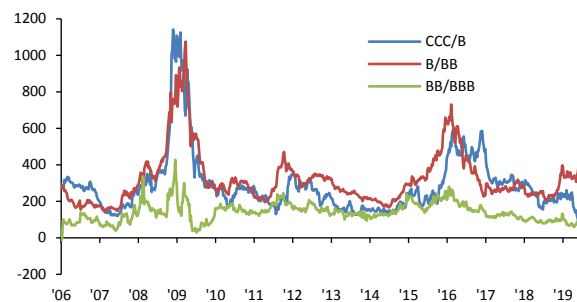
## HEDGE FUNDS

low and given that the cumulative five-year default rate for CCC bonds is roughly 47%. Averaging 17.3% since 2005 – interestingly, it hit a peak of over 37% in 2007, one year before the financial crisis erupted – this quality measure ended 2018 at the same level. More recently, it stood at 10.2%, suggesting that conditions have become less supportive. While this is only one of four key credit cycle metrics that is beginning to signal a potential turning point, it is no doubt a metric worth monitoring in the period ahead.

As always, when we evaluate market conditions and prospects going forward, we also focus on three additional measures: compression trades, liquidity premium, and CDS basis. The following paragraphs provide an overview of where they currently stand.

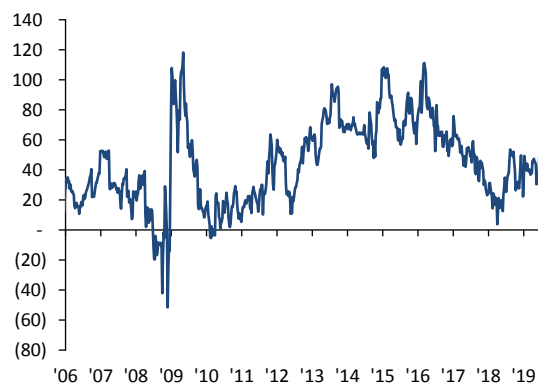
**Compression trades.** Mean reversion is a powerful source of return-generation for long/short credit hedge funds: they tend to outperform benchmarks when credit spreads tighten across segments with different ratings. As can be seen in the chart below, while B/BB spreads have risen this year, other high yield differentials have narrowed.

### Relative Credit Spread Differentials Across Ratings



**Liquidity premium.** Our research has shown that performance in this segment tends to be positively associated with the presence of a liquidity premium, which can be assessed by measuring the difference between global high yield spread indices and their liquid high yield counterparts. As the following chart illustrates, this gauge has been largely range-bound, fluctuating between 20 and 60 over the past several months.

### Historical Corporate High Yield Liquidity Premium



**CDS basis.** One metric that has proved useful as a contrarian indicator is the CDS basis, which can serve as a proxy for gauging stress within hedge fund portfolios. Because most managers go long through cash bonds and short by way of CDS, this measure often falls to new interim lows during periods of violent de-risking. In recent months, it has been hovering near its historical average, as indicated in the following chart, suggesting that the strategy's opportunity set remains somewhat lacking.

### CDS High Yield Basis



Beyond our shores, developments have been a tad more interesting. Over the past few months, spreads between European and US credit have narrowed, as can be seen in the following chart.

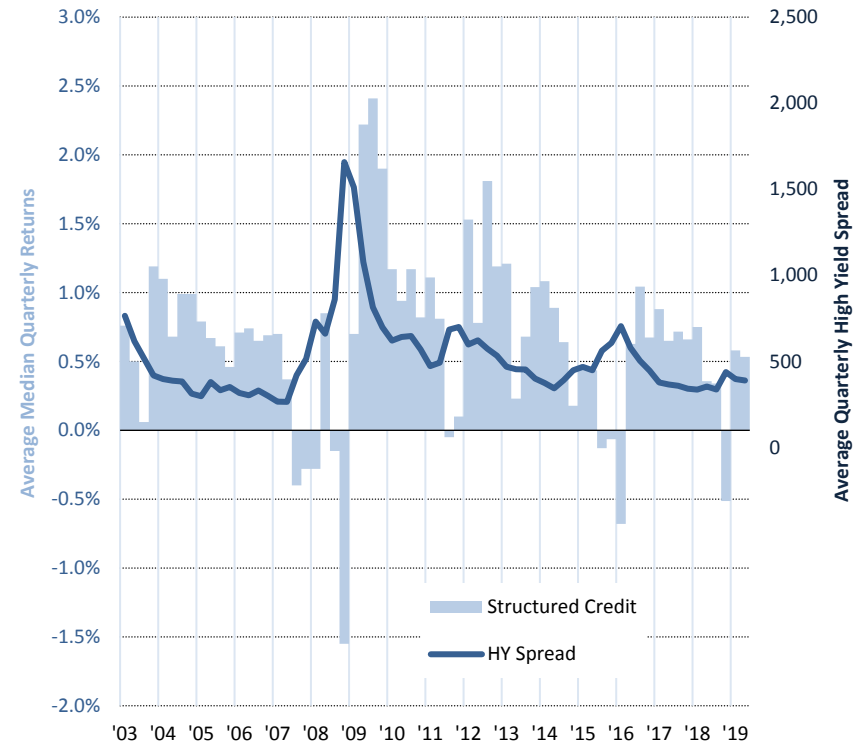
### EUR-US High Yield Spread



## Structured Credit

| Driver of Strategy Returns       | Negative | Neutral | Positive | Comments                                                                                                                                                                                                                                                     |
|----------------------------------|----------|---------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Valuation                        | ■ ■ ■    | ■       | ■ ■ ■    | Recoveries in most structured credit segments have lagged those seen in more liquid corporate credit counterparts, indicating a relative value opportunity.                                                                                                  |
| Flows                            | ■ ■ ■    | ■       | ■ ■ ■    | Hunt for yield ongoing                                                                                                                                                                                                                                       |
| Carry                            | ■ ■ ■    | ■       | ■ ■ ■    | Net-of-fees carry is too low to be an attractive driver of returns.                                                                                                                                                                                          |
| Idiosyncratic Legal & Structural | ■ ■ ■    | ■       | ■ ■ ■    | Put-backs and monoline wrappers are creating optionality in selected issues as well as CLO refinancings and resets.                                                                                                                                          |
| Liquidity                        | ■ ■ ■    | ■       | ■ ■ ■    | With broker-dealers scaling back their market-making activities, the liquidity environment remains unsupportive; strong demand from real money investors has helped, but how they will behave in a severely stressed market environment remains a wild card. |
| Financing                        | ■ ■ ■    | ■       | ■ ■ ■    | Financing capability continues to be somewhat challenged by balance sheet scarcity.                                                                                                                                                                          |

## Structured Credit Strategy



Median returns are those of Investcorp's strategy peer group. Strategy peer groups are created by Investcorp and are comprised of funds that Investcorp has judged to be relevant for each strategy.

Source: PerTrac, Bloomberg, Investcorp



## HEDGE FUNDS

### Structured Credit

Hedge funds focused on structured credit have underperformed corporate credit-oriented peers, failing to keep pace with the risk-on rally that began the year. Collateralized loan obligations (CLOs) have been a notable laggard, owing largely to concerns about the potential for a flat-to-falling interest-rate environment, which has already spurred investors to shun floating-rate leveraged loans. Amid a series of shelved deals that signaled faltering confidence, investors pulled roughly \$33 billion from US leveraged loan funds over the year through August. In fact, since that month began, mutual funds and exchange traded funds that invest in the segment have seen \$2.6 billion in out-flows, according to EPFR Global data, and are on track to surpass the 2015 record of \$24 billion.

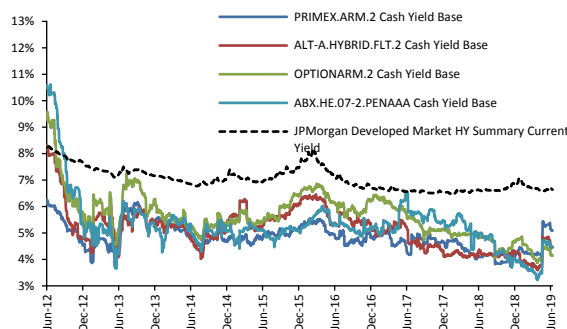
Not surprisingly, the Federal Reserve's decision to cut interest rates in July and signal a willingness to ease further has been less-than-helpful for the sector. That is because investors who hold lever-aged loans, which pay a floating rate of interest that tracks movements in market rates, earn less when rates fall. Against this backdrop, five prospective loan deals were pulled in August, including offerings for US oil pipeline company Glass Mountain, marketing group Golden Hippo, and software company Chief Power Finance. In addition, Ancestry.com, the DNA analysis group, slashed the size of its loan sale by \$200 million to \$950 million, while WS Audiology, a hearing aid products company, was forced to scale down its offering and shift it from the US to Europe.

Lending further weight, the prices of CLOs, which have levered exposure to diversified portfolios of leveraged loans, have also come under pressure. Most recently, post-credit-crisis-issued CLO equity has been trading at 70 and below, despite the fact that credit concerns have been limited or largely absent.

Even so, the performance of collateralized obligations remained in the black: the HFRI RV: FI-Asset Backed Index gained 1.03% over the first two months of last quarter and is up 4.26% year-to-date through August. That said, the segment's performance this year pales in comparison to that of HY Credit. Indeed, the strategy has often failed to deliver an attractive combination of carry and capital preservation; at best, one is typically substituted for the other.

Regardless, the trend of the broader set of low-carry opportunities has largely worsened over the last 12 months, with RMBS – which accounts for a sizable slice of the structured credit space – seeing cash yields fall over the span, as illustrated in the chart below.

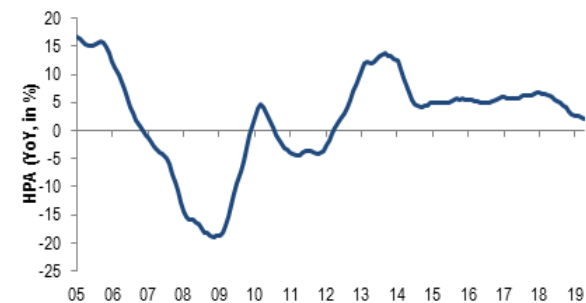
### Historical Non-Agency RMBS Cash Yield



Source: JPMorgan

Making matters worse, the housing market has continued to falter. While broader economic fundamentals still paint an encouraging picture for real estate, home sales have been slowing and prices have remained under pressure, as can be seen in the following chart.

### S&P Case Shiller Home Prices Appreciation Index



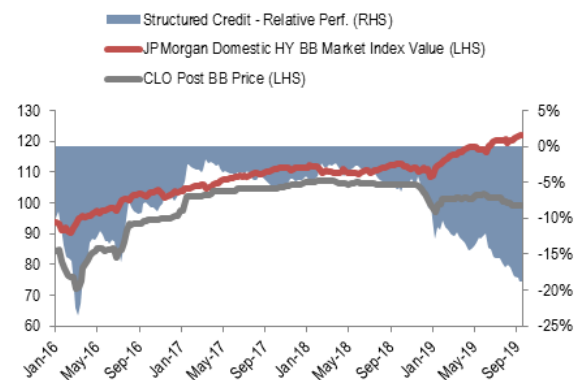
Source: Bloomberg

In the CMBS space, amid a pick-up in trading activity and issuance and an ongoing recovery in spreads, all eyes remain focused on developments in the retail sector. In fact, the rebound that has largely been underway since the year began has encouraged many managers to look more closely at positioning on the short side of the CMBX index.

Collateralized loan obligations, meanwhile, have seen prices recover amid improvement in underlying loan indices, though both remain slightly below last year's highs, as evidenced by the following chart. With spread arbitrage continuing to be under pressure, new issuance will likely remain constrained.

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## Relative Performance between CLOs and Corporate Credit



Source: JPMorgan, Investcorp

More broadly, while optionality is somewhat limited amid the rebound in legacy positions, idiosyncratic opportunities remain, including such relatively safe plays as callable RMBS and TRUPS CDOs. As an aside, near-maturity CMBS have continued to trade at steep discounts, even though most have been maturing with sharp recoveries.

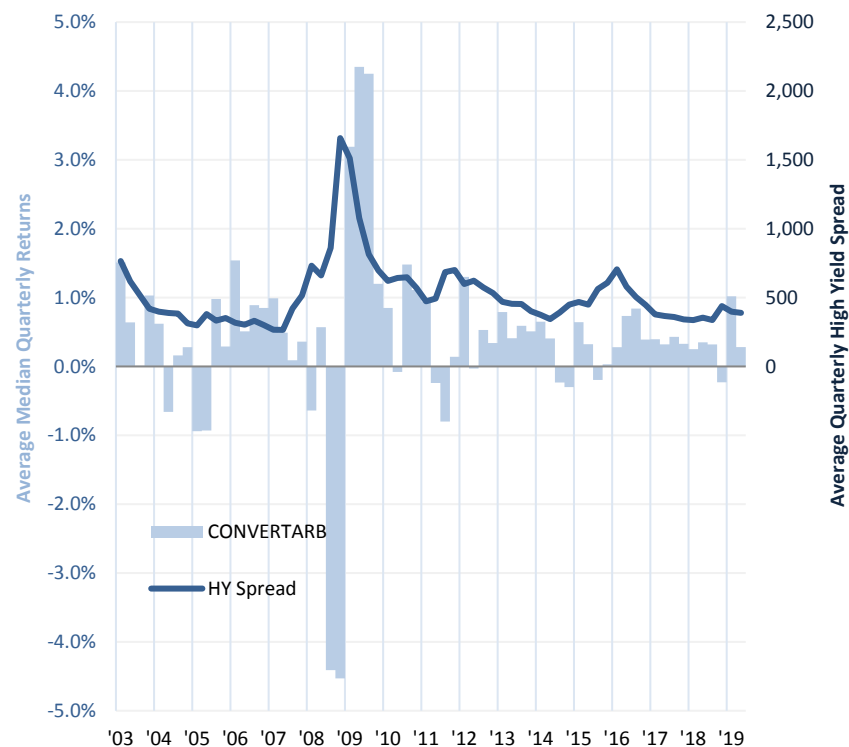
Otherwise, non-qualified and non-prime mortgages are still generating outsized returns; in addition, they offer attractive cushions against down-side risk and enhanced liquidity stemming from greater market acceptance and the increased pace and scope of securitization. In addition, formerly attractive strategies such as legacy RMBS put-back litigation, which has suffered in the wake of adverse settlements, have continued to lose favor.

## HEDGE FUNDS

### Convertible Arbitrage

| Driver of Strategy Returns | Negative | Neutral | Positive | Comments                                                                                                                                   |
|----------------------------|----------|---------|----------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Valuation                  | ■ ■ ■    | ■       | ■ ■ ■    | Valuations have continued to come in limiting the strategy's upside potential in future quarters.                                          |
| Issuance                   | ■ ■ ■    | ■       | ■ ■ ■    | New issuance has come down in recent months, reducing the alpha tailwinds of new issue trading generally available to hedge fund managers. |
| Capital                    | ■ ■ ■    | ■       | ■ ■ ■    | Long-only buyers have become an important part of the market, diffusing returns to the long-short risk premium.                            |
| Liquidity                  | ■ ■ ■    | ■       | ■ ■ ■    | Liquidity remains a concern as broker-dealers scale back market-making activities.                                                         |

### Convertible Arbitrage Strategy



Median returns are those of Investcorp's strategy peer group. Strategy peer groups are created by Investcorp and are comprised of funds that Investcorp has judged to be relevant for each strategy.

Source: Investcorp, Bloomberg

## Convertible Arbitrage

Convertible bond arbitrage hedge funds gained a net 0.89% in the July-August period and were up 7.7% over the year's first eight months, according to HFRI indices. Aided by the broad rally in risk assets and a narrowing in credit spreads, the strategy has been one of 2019's best performers, slightly outpacing the 7.4% rise in the HFRI Fund Weighted Composite for the year-to-date through August. Segments that have been particularly strong include US mid- and large-caps, as well as the media, technology, telecommunications and industrials sectors.

The underlying market also fared quite well. Bolstered by strong gains in January and in June, up 7.9% and 4.5%, respectively, the Barclays US Convertible index posted a 15.1% return through August, though it trailed the 18.3% rise in the S&P 500 over the same span. The US measure also outpaced the BAML 300 index, a proxy for the global market, which rose 9.1%, and significantly outperformed European, Asian and emerging market convertible markets, as can be seen in the chart below.

### Convertible Arbitrage Hedge Funds – 1 Year Rolling Performance



Source: Investcorp, Macrobond

Despite the strategy's strong relative and absolute performance so far, we remain cautious and are downgrading our outlook. As we have noted in prior Environment Reports, the convertible space – not to mention the credit complex more broadly – is faced with a number of headwinds, which had previously led us to adopt a neutral stance. At this stage of the business cycle, we are increasingly focused on liquidity ahead of a potential deterioration in credit quality and a widening of spreads as the risk of a downturn or recession increases. Valuations do not appear compelling, either.

Tactically, we favor shorter-duration and volatility-oriented strategies in more liquid large cap names, and we recommend avoiding explicit credit-focused plays. By the same token, we see increased opportunities in gamma trading through the construction of synthetic put positions, and believe the use of excessive leverage at this juncture really only makes sense with respect to this type of structure.

Volumes – illustrated in the following chart – and the value of outstanding obligations in the convertible market, currently at \$1-1.5 billion and \$214 billion, respectively, have continued to shrink. While there was something of a rebound from 2015 through mid-2018, things have since deteriorated. Separately, the liquidity premium – the performance of the overall market relative to the most liquid segments – has edged lower in recent months, as shown in the second chart, indicating that less liquid issues have fared better than their more liquid counterparts.

### US Convertible Bonds Average Daily Volume (3-Month Average)



Source: Investcorp, Macrobond

### Liquidity Premium in US Converts



Source: Investcorp, Macrobond

In terms of new issuance, conditions have softened in recent months. At the end of June, it appeared that the full-year total was on track to match last year's tally, the largest since 2014, but that no longer appears to be the case. At \$32.8 billion, US new issuance through the third quarter is now lagging the \$46.4 billion seen in the year-ago period, as indicated by the following chart. The 12-month average of monthly gross issuance has also been heading lower.

## HEDGE FUNDS

### US Gross Issuance



Source: Investcorp, Macrobond

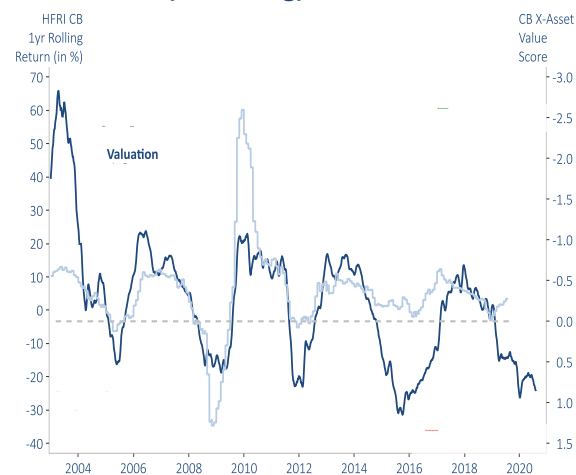
Generally speaking, a healthy new issuance market has proved to be a key source of return for the convertible arbitrage strategy, potentially adding meaningfully to performance. Managers who are active in the primary market and who can selectively purchase theoretically cheap issues can flip them for a profit. Alternatively, they may be able to acquire secondary market positions dumped by outright or index buyers at attractive discounts. Historically, primary market activity has been correlated with interest-rate movements, suggesting that the recent softening may stem in part from the rally in duration we have seen since the summer.

As before, the main drivers of US issuance in recent months have been growth capital demand, corporate refinancings, and M&A activity, followed by exchanges, buybacks and capital expenditure. Also bolstering activity are the limits on interest deductibility, which enhance the attractiveness of convertibles relative to high yield debt and which we first discussed before they were introduced with the Tax Reform Act of 2017.

Flexible structures have served as a tailwind, too. Continuing the trend of what we have seen since 2019 began, a healthy share of last quarter's issuers were tapping the convertible market for the very first time.

When it comes to valuation, meanwhile, our top-down indicators only add to our concerns about liquidity and a softening primary market. Based on the latest readings, convertibles appear rich to other asset classes. They also suggest a less-than-upbeat outlook for the strategy. As can be seen in the following chart, which details the relationship between valuations – derived from a regression of convertible bond performance versus that of equity, credit and volatility indices – and convertible bond arbitrage hedge fund one-year forward performance, there seems to be little to go for.

### US Convertible Bond Valuations vs. Hedge Fund Performance (1-Year Lag)



Source: Investcorp, Macrobond

### US Convertibles vs. High Yield Corporate Bonds



Source: Investcorp, Macrobond

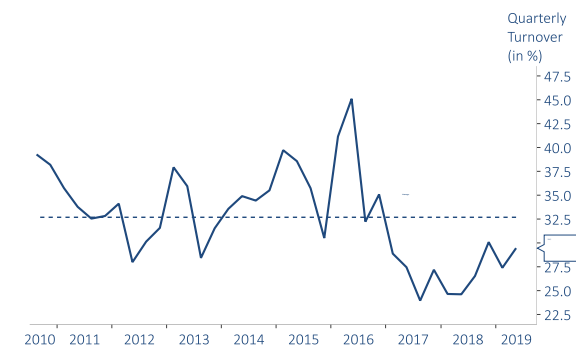
Another potential negative is the group's current positioning. Drilling down into the portfolios of the leading managers, there are growing signs of crowding across the group's core holdings, as suggested by the first chart below. In addition, other metrics, including average fund turnover – highlighted in the second chart – suggest that the group is holding onto positions for longer periods of time, potentially signaling a shortage of new opportunities – or, perhaps, a degree of complacency.

### Average Fund Crowding



Source: Investcorp, Macrobond

## Average Fund Turnover



Source: Investcorp, Macrobond

Overall, the combination of liquidity concerns, a deterioration in the new issue market, heightened valuations, and potentially unhelpful positioning lead us to conclude only one thing: now is the time to be limiting or reducing exposure to the convertible bond arbitrage space.

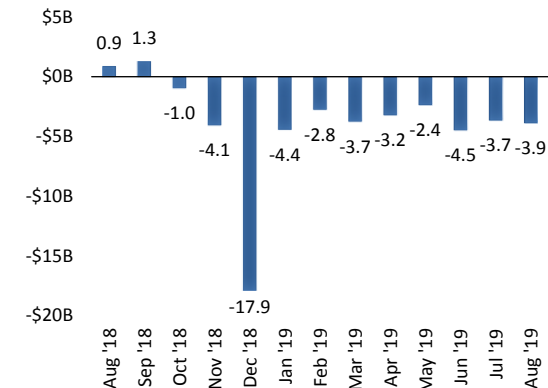
## U.S. AND EUROPEAN BROADLY SYNDICATED LEVERAGED LOANS

### US Leveraged Loan Markets

US leveraged loans, as measured by the Credit Suisse Leveraged Loan Index (“CSLLI”), gained 0.50% over the July-August span; a 0.28% decline in the latter month partly offset a 0.78% increase in the earlier one. Year to date through August, the market was up 5.94%, seemingly shrugging off concerns about a potential trade war and the Federal Reserve’s dovish pivot.<sup>1</sup>

From a technical standpoint, retail-driven outflows, highlighted in the chart below, have remained a headwind. As of September 4, loan mutual funds had witnessed 42 straight weeks of redemptions, amounting to a cumulative total of \$36 billion<sup>2</sup> over the span.

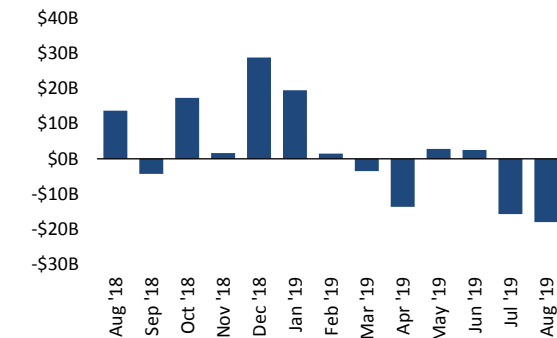
#### US Prime Fund Monthly Flows



Source: LCD, an offering of S&P Global Market Intelligence

Despite this, the market witnessed a sizable supply shortage during July and August, as can be seen in the next chart, owing to ongoing demand from CLOs, continued high loan repayments, and a normal late-summer lull in issuance. For the year through August, the shortfall stood at \$25 billion.

#### US Institutional Market Supply-Demand Balance



Source: LCD, an offering of S&P Global Market Intelligence

In the CLO arena, new issuance totaled \$16.6 billion<sup>3</sup> in July and August. Over 2019’s first eight months, the total was \$81.7 billion, which, while respectable, was less than the \$92.4 billion seen in August of 2018, a record year for issuance.

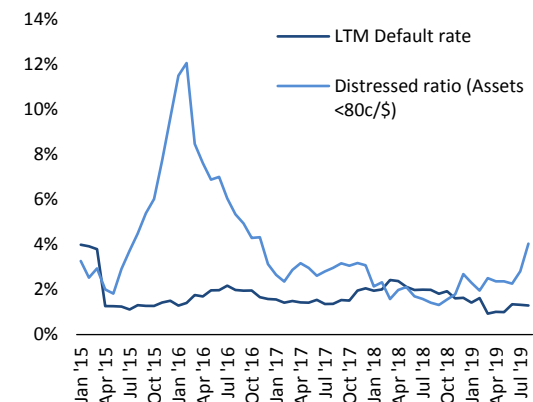
In terms of the net supply of new leveraged loan paper –new issuance less repayments – the \$24.8 billion July-August deficit represented the largest shortfall in any two-month period for at least a decade. It was mostly back-end loaded, driven primarily by several large repayments, not least of which was the \$11 billion repayment by First Data following its \$22 billion acquisition by Fiserv.

For the year through August, net leveraged loan issuance remained modestly positive at \$28 billion, reflecting the difference between \$187 billion of new offerings and \$158 billion of repayments – an average of \$3.6 billion per month. By comparison, net new issuance at the same point last year was \$132.9 billion, or \$16.6 billion per month<sup>4</sup>. Similar to what we saw in prior periods, issuance has largely

been driven by LBO and M&A financing, corporate refinancings, and opportunistic dividend deals, which accounted for 47%, 22% and 9% of institutional loan volumes, respectively<sup>5</sup>.

Overall, the fundamentals still seem sound. The trailing 12-month default rate was broadly unchanged in August at 1.29%, which followed readings of 1.34% in June and 1.63% last December, and it remains well below its 2.9% historical norm. That said, other indicators of stress have been moving higher. This includes the percentage of issues priced below 80 cents in the dollar – illustrated below – which rose from 2.81% in July to a three-year high of 4.03% in August, though admittedly, it remains well below its early- 2016 peak. In addition, the proportion of facilities rated CCC+ or below rose to a two-year high of 7.01%.<sup>6</sup>

#### US Prime Fund Monthly Flows



Source: LCD, an offering of S&P Global Market Intelligence

<sup>1</sup> Credit Suisse Leveraged Loan Index August 30, 2019

<sup>2</sup> LCD News/S&P Sept 5, 2019

<sup>3</sup> LCD News/S&P Sept 3, 2019

<sup>4</sup> LCD News/S&P Sept 3, 2019

<sup>5</sup> S&P Global Loan Stats Weekly August 29, 2019. Institutional new issue loan by purpose YTD

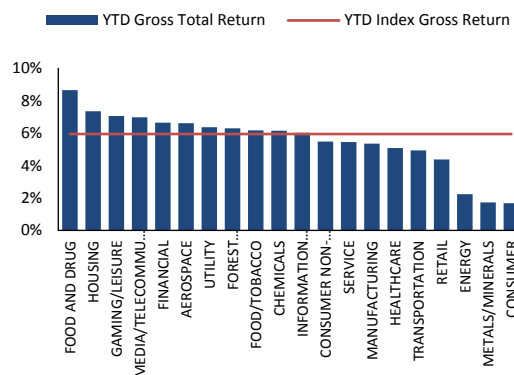
<sup>6</sup> LCD News/S&P Sept 4, 2019



## U.S. AND EUROPEAN BROADLY SYNDICATED LEVERAGED LOANS

Sector-wise, performance was somewhat mixed in the July-August period YTD, as the following chart illustrates. Metals and minerals, energy, retail, and healthcare, down 2.09%, 2.27%, 0.77% 0.14%, respectively, were the notable losers, while aerospace, consumer durables, financials, gaming and leisure, and housing, up 1.22%, 1.33%, 1.24%, 1.22% and 1.18%, respectively, led the pack. Year to date through August, consumer durables, metals and minerals, and energy, with gains of 1.63%, 1.73%, and 2.23%, respectively, were the major laggards, while food and drug, and housing, which posted returns of 8.65% and 7.35%, respectively, were the standouts.

### US Prime Fund Monthly Flows



Source: Credit Suisse Leveraged Loan Index. August 30, 2019

With respect to credit quality, the more highly-rated issues continued to outperform their lower-rated counterparts over the two-month span and for the year-to-date through August: BB-rated issues were up 0.98% and 6.84%, respectively; B-rated obligations tacked on 0.38% and 5.53%, respectively; and CCC-rated issues lost 0.44% and gained 2.30%, respectively.<sup>7</sup>

<sup>7</sup> Credit Suisse Leveraged Loan Index. August 30, 2019

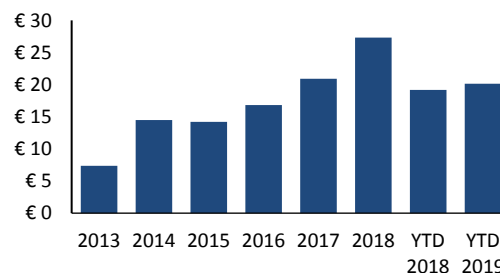
The average price of the assets in the CSLLI was 96.29 at the end of August, versus 96.78 in June and 94.09 at the end of last December.

### European Leveraged Loan Markets

In Europe, leveraged loans were aided by strong technical tailwinds during the summer, which helped the Credit Suisse Western European Leveraged Loan Index ("CSWELLI") to post returns in July and August of 0.68% and 0.30%, respectively. Those back-to-back gains added up to a solid 0.98% return over the two-month span, with significantly less volatility than we saw in the US.<sup>8</sup>

In terms of supply and demand, the latter has continued to outweigh the former. With EUR 49 billion of offerings coming to market through August, European loan issuance has paled in comparison to 2018's tally – admittedly, a post-crisis record – registering a 31% drop from the EUR 78 billion recorded in the year-ago period.<sup>9</sup> That said, repayments have also been somewhat tepid; year-to-date through August, the S&P European Loan Index ("ELLI") has seen EUR 13.5 billion of repayments, down from EUR 20.7 billion at the same point in 2018.

### US Prime Fund Monthly Flows

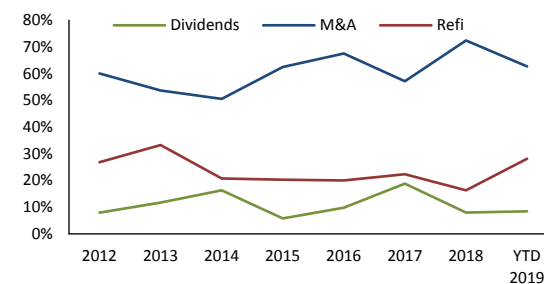


Source: LCD, an offering of S&P Global Market Intelligence

<sup>8</sup> Credit Suisse Western European Leveraged Loan Index (hedged to USD). August 30, 2019

CLO issuance, meanwhile, has remained strong, bolstering prices. During the year through August, there were EUR 20.1 billion of offerings – not to mention a post-crisis record monthly total of EUR 5.4 billion in July – representing an increase of 5% from what we saw over the same span last year. Supported by resilient market conditions, opportunistic supply has increased; so far, sponsors have taken out EUR 2.5 billion in debt-funded dividends, almost double the EUR 1.4 billion tally for the whole of 2018. There has also been a proportionate increase in refinancing activity, as can be seen in the chart below.<sup>10</sup>

### European Sponsor Issuance by Type



Source: LCD, an offering of S&P Global Market Intelligence

Against this backdrop, the average price of the assets in the CSWELLI was 97.96 at the end of August, virtually unchanged from 98.01 in June and roughly 1.5 points higher than the level of 96.54 seen in December. At 422 basis points, the benchmark's average discount margin was also fairly steady, up only marginally from 420 basis points at the end of June.

Performance across sectors was mixed in the July-August span. One notable laggard was aerospace, which lost 3.62% on downswings in Doncasters and

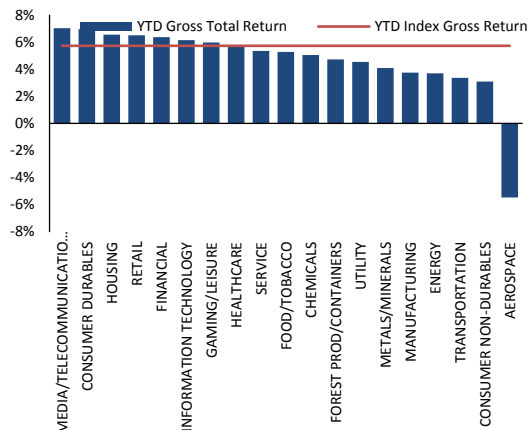
<sup>9</sup> LCD News/S&P Sept 3, 2019

<sup>10</sup> LCD News/S&P Sept 6, 2019

## U.S. AND EUROPEAN BROADLY SYNDICATED LEVERAGED LOANS

Survitec, though it's worth keeping in mind that it comprises only 0.90% of the index. Among the winners were financials, food and tobacco, retail, and media and telecommunications, which gained 1.49%, 1.40%, 1.36%, and 1.36%, respectively. Year-to-date through August, the pattern was somewhat similar, as can be seen below; aerospace pulled up the rear with a loss of 5.48%, while media and telecommunications – with an 18.3% weighting, the largest of the groups – posted a return of 7.03%.

### US Prime Fund Monthly Flows



Source: Credit Suisse Western European Leveraged Loan Index (hedged to USD). August 30, 2019

Credit-wise, riskier CCC-rated obligations continued to lag the overall market, with CCC names down 0.38% in the two-month span and up only 1.10% year-to-date. In contrast, BB and B-rated loans continued to perform well, gaining 0.79% and 1.23% from July through August and 5.80% and 5.98% over this year's first eight months.<sup>11</sup>

The region's fundamentally benign environment remained intact, with the market registering its eighth straight month of a zero-default rate.

Nevertheless, there are hints that stress is on the rise. In particular, the percentage of issues in the CSWELLI that are priced below 80 rose to 1.41% in August from 0.89% in June, though admittedly, it is barely changed from the 1.35% level seen at the end of 2018. From where we sit, however, this development appears idiosyncratic and focused on a small number of borrowers, rather than reflecting broader sector trends.

### Loan Market Outlook

Broadly speaking, developments last quarter confirmed our prior view that central banks as a group would gravitate toward a more accommodative posture. That said, while the Federal Reserve's quarter-point interest rate cut in September was in line with expectations, the European Central Bank's shift has been more pronounced than even we expected. Following its recommencement of renewed asset purchases and a series of highly dovish comments from policymakers, German Bund prices have rallied sharply. As of September 17, 10-year yields had declined to -0.47%<sup>12</sup>, an 11 basis point drop from where they were at the end of June and had traded as low as -0.71% in August.

Like many observers, we hope that monetary policymakers' shift in stance helps diminish the risks to growth going forward and aid the fundamental performance of the businesses we invest in, but there might also be some collateral damage. Among other things, interest-rate cuts tend to diminish retail demand for floating-rate loan products, as we have previously noted.

However, we continue to believe that persistent CLO demand will benefit the US loan market, while

positive technical factors should continue to buoy conditions on the other side of the Atlantic. In particular, given the prevalence of 0% floors in European leveraged loans and CLO liabilities, we believe that expected returns remain attractive with EURIBOR rates trading near -0.4%.

In terms of our outlook for the US loan market for the balance of the year, we continue to anticipate coupon-like returns that, given the current position, should lead to full-year performance above 8%. In Europe, we expect that a large primary deal pipeline – of admittedly varying quality – and strong demand for paper will facilitate similarly attractive performance, though we may also see some pressure on underlying spreads, leading to returns of around 7% on a hedged-to-US dollar basis.

Despite our optimistic assessment, we acknowledge that the macro risks in both regions have increased in recent months. These include heightened tensions in the Middle East – especially in the wake of the recent attack on certain Saudi Aramco oil facilities – and their potential impact on energy prices, and the still-unresolved Brexit situation, where a no-deal UK exit from the European Union at the end of October seems more rather than less likely.

With that in mind, we believe increased bouts of short-term volatility are virtually inevitable as investors react to heightened uncertainty and a barrage of headlines aimed at attracting eyeballs rather than spurring rationale debate. Nevertheless, we believe that the inherently defensive characteristics of leveraged loans should help them to fare well relative to other sub-investment grade asset classes if and when market conditions grow more turbulent.

<sup>11</sup> Credit Suisse Western European Leveraged Loan Index (hedged to USD). August 30, 2019

<sup>12</sup> Bloomberg as at September 17, 2019



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