

Hedge Fund Industry Deep Dive

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H1 2021 Overview

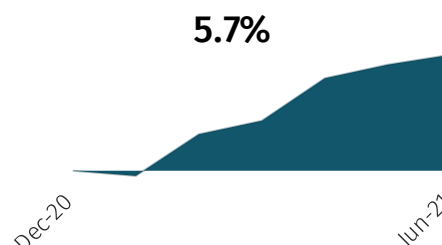
Whilst we didn't see the same level of volatility during the first half of 2021 as the same period last year, there was still plenty of drama and incident to impact global markets and the fortunes of the hedge fund industry.

In what turned out to be an eventful January, Joe Biden was sworn in as US President, while Donald Trump became the first US President to be impeached twice. Runoff elections in the US on 5th January in Georgia saw control of the Senate handed to the Democrats. A \$1.9tn stimulus package announcement on 14th January provided a significant boost for risk assets. However, by the end of the month the focus had shifted towards one of the main market stories of the year – namely the impact of coordinated activity by retail investors in a number of stocks. This 'Reddit' retail investor-led phenomenon led to "the mother of all short-squeezes" and a period of painful hedge fund deleveraging. The week of 25th January saw the largest US single stock de-grossing on record¹, with a number of prime brokers reporting the worst monthly alpha they had ever observed. The first week of February then saw the 'snap-back' and outsized positive alpha. As one would expect, this manifested in significant P&L volatility for many hedge fund managers in the equity space – discussed further in the Industry Performance Review below.

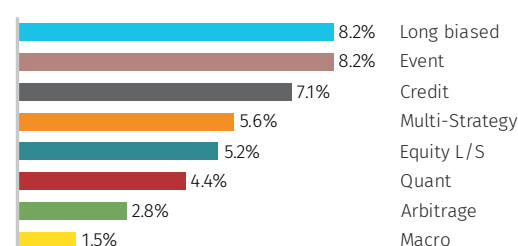
1. Source: Goldman Sachs Prime Content (1st February 2021)

*HF Composite = Aurum Hedge Fund Data Engine Asset Weighted Composite Index. All figures and charts use asset weighted returns unless otherwise stated. All Hedge Fund data is sourced from Aurum Hedge Fund Data Engine. For definitions on how the Strategies and Sub-Strategies are defined please refer to <https://www.aurum.com/hedge-fund-strategy-definitions/>, and for information on index methodology, weighting and composition please refer to <https://www.aurum.com/aurum-strategy-engine/>

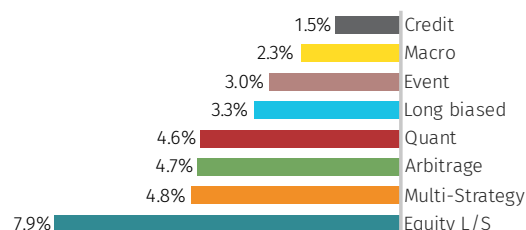
HF COMPOSITE* NET RETURN (YTD)



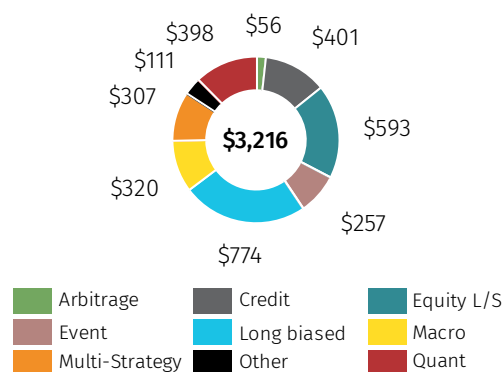
MASTER STRATEGY NET RETURN (YTD)



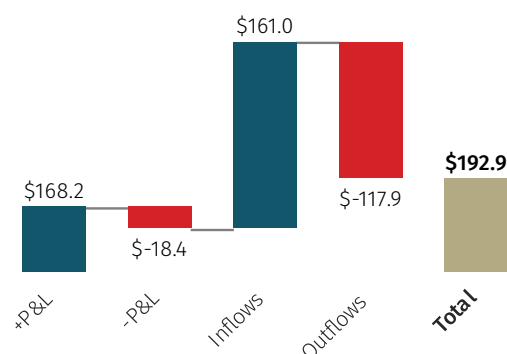
STANDARD DEVIATION (YTD)



AUM (\$BN)



AUM CHANGE \$BN (YTD)



H1 2021 Overview cont.

Other key themes included the rising geopolitical tensions with China and Russia. There was unrest in Hong Kong, including arrests of individuals accused of an alleged plot to overthrow the government. These arrests were condemned by the US and the UK. Elsewhere, trade tensions between the US and China and concerns over security and intellectual property continued. The SEC introduced rules requiring foreign firms to comply with US audit standards – a move essentially seen to target the delisting of Chinese companies. Bilateral talks were held in March between the US and China but with little progress. In April, the US issued sanctions against Russia for alleged interference in the election as well as escalating tensions in Ukraine.

Through February, equities and commodities exhibited strong performance, driven by the global vaccination programmes and further stimulus measures. However, the huge injection of stimulus, combined with low rates and the prospects of an economy emerging from the shadow of COVID-19, led to investors switching their focus to inflationary concerns and speculation of tighter monetary policy. This was evidenced by a sharp rise in bond yields. Data from the US Census Bureau showed a sharp increase in US retail figures – supported by stimulus cheques distributed to US households. The Fed, whilst acknowledging the potential for short-term inflation, indicated it would not change policy and would continue to be accommodative. This stance was similarly shared by the ECB, which announced a EUR 1.85tn Pandemic Emergency Purchase Program in March. Risk assets performed strongly in March, but there was some significant emerging market volatility, with Chinese equities negative on the month.

April saw a continuation of strong investor sentiment and optimism regarding the COVID-19 recovery. The IMF forecast 6% global growth, further supported by various global stimulus packages. Commodities continued to see exceptionally strong performance, while the USD lost some ground and US bond yields fell.

June was another strong month for equities, although the Fed adopted a more hawkish stance following the mid-month meeting, with inflation prospects the key area of concern. However, towards the end of the month, market sentiment received another boost as Fed Chairman Powell reiterated the Fed's commitment to maintaining a low rate environment as the economy recovers, while a \$1.2tn bipartisan infrastructure deal was announced.

Markets summary

Risk assets appreciated in H1, supported primarily by the continued roll-out of the global COVID-19 vaccination programmes as well as the announcement of several major stimulus packages. Volatility levels were also impacted as rising bond yields and inflationary concerns weighed on investor sentiment. Bond yields rose globally, although retrenched in May and June. From a performance perspective, global bonds** had a torrid Q1, losing nearly 5% before recovering some of this loss in Q2 ending H1 down 3.6% YTD.

Global equity markets*** exhibited exceptionally strong performance through H1 2021, up 11.7% YTD. Europe and the largest capitalisation stocks in the US outperformed, while Asian and emerging market indices lagged behind. The 'reflation trade' has been very strong in the commodity space, with the energy (natural gas, oil) and softs (corn, sugar) complexes performing exceptionally well. Precious metals (gold/silver) were down on the year. Credit also performed well, particularly in the lower grade (CCC) space. In currencies, there has been some volatility. The USD Index is up year-to-date (primarily due to strong appreciation in June), with particularly strong performance vs the yen and to a lesser extent the euro.

Hedge fund industry performance review

The hedge fund industry continued its strong run of performance through H1 2021, up 5.7% YTD, after finishing up nearly 9% in 2020. The best performing strategies were event (up 8.2%) and long biased (up 8.2%), driven by a particularly strong February to April period that coincided with strong equity market performance. Credit strategies were also consistent with positive performance every month of the period, finishing up 7.1%. Multi-strategy funds marginally underperformed the broader industry (5.6%), as did equity l/s (5.2%). Essentially, the hedge fund strategies that tend to exhibit more beta to risk assets were able to benefit from the tailwinds provided by appreciating markets as well as the continued 'normalisation' of some of the extreme dislocations caused by the dramatic events of Q1 2020.

NET RETURN OF MASTER STRATEGIES (1 YR)

Net Performance [†]	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	YTD	12M
Long biased	3.89%	3.26%	-1.80%	-0.67%	7.83%	3.67%	0.47%	1.45%	0.71%	3.10%	1.51%	0.75%	8.24%	26.61%
Event	2.08%	2.57%	0.01%	-0.09%	5.67%	3.78%	0.73%	2.57%	1.58%	2.05%	0.61%	0.45%	8.23%	24.16%
Credit	1.32%	1.30%	0.60%	0.33%	3.29%	1.96%	1.69%	1.60%	0.70%	1.22%	1.03%	0.69%	7.13%	16.86%
Multi-Strategy	1.95%	1.41%	0.77%	0.54%	2.39%	3.26%	-0.32%	3.47%	0.40%	1.51%	0.27%	0.22%	5.64%	16.98%
Equity L/S	2.39%	2.96%	0.00%	0.16%	5.72%	4.51%	-2.20%	4.09%	-0.39%	2.66%	-0.27%	1.35%	5.23%	22.76%
Quant	1.29%	0.01%	-1.25%	-1.00%	0.52%	2.78%	-1.39%	0.81%	1.70%	2.26%	1.12%	-0.16%	4.37%	6.80%
Arbitrage	2.03%	1.06%	0.93%	0.25%	2.09%	2.45%	1.90%	2.25%	-1.11%	-0.62%	0.16%	0.27%	2.84%	12.23%
Macro	1.99%	1.69%	-0.85%	0.18%	2.94%	2.39%	0.03%	0.22%	0.64%	0.88%	0.68%	-0.92%	1.52%	10.23%
HF Composite*	2.30%	2.02%	-0.47%	-0.16%	4.35%	3.25%	-0.25%	2.05%	0.65%	2.04%	0.64%	0.46%	5.71%	18.11%
Bonds**	3.62%	-0.30%	-0.39%	-0.15%	1.99%	1.34%	-1.08%	-1.77%	-2.09%	1.28%	0.49%	-0.39%	-3.55%	2.43%
Equities***	4.90%	5.94%	-3.23%	-2.20%	12.63%	4.86%	-0.21%	2.64%	2.28%	4.15%	1.33%	1.04%	11.71%	38.75%

Hedge fund industry performance review cont.

Rolling 12m performance for the hedge fund space in aggregate sits at just over 18%, driven by an extremely strong H2 2020, as markets continued their recovery from the COVID-19 driven lows last March. The massive bounce in risk assets provided a significant tailwind for strategies carrying more beta. For example, long biased was up over 26%, event was up just over 24%, and equity l/s was up just under 23%.

As highlighted in the H1 2021 Overview above, the activities of retail traders led to a set of events that significantly impacted equity l/s strategies and hedge fund returns in Q1. A number of equity l/s and multi-strategy funds that were heavily exposed to 'lower net' equity l/s strategies, experienced losses ranging from low single digits to catastrophic losses of 30% and beyond. A massive 'short-squeeze', leading to an escalating cycle of short-covering and risk reduction led to contagion across the equity l/s space. The initial impact of losses were experienced by a handful of funds that had short exposure to the 'meme stocks', which saw a stratospheric rise in value. In February as many of these short-term technical factors aggressively reversed, so did the fortunes of these managers. What can be clearly seen is that the contagion did not spread across the whole hedge fund space, with strategies such as event, long biased, credit, arbitrage and macro sailing through January relatively unscathed, which provided a positive demonstration of the benefits of diversification.

Given the general strength of risk assets in H1, it was not surprising to see the long biased strategy doing well; however, long exposure to global fixed income will have proven to be a more challenging area for such funds, particularly during the Q1 bond sell-off.

Credit was the third best performing hedge fund strategy of H1 2021, benefitting from the more positive investor sentiment. Returns were driven primarily by distressed credit funds; this is discussed further in the Sub-Strategy section below.

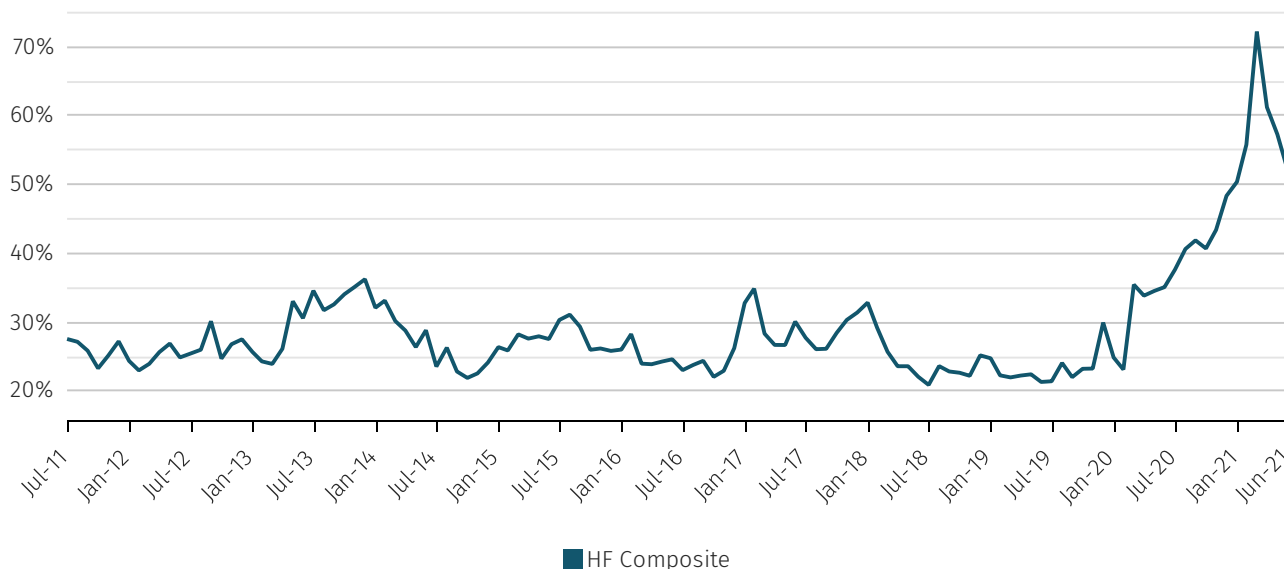
Quantitative strategies are no longer 'bottom of the pile' as they were at the end of 2020, however, the strategy still lags broader hedge fund performance and has been the poorest performing strategy by some margin over a five year period (CAR of just under +1.6%).

After a very strong 2020 (particularly on a risk-adjusted basis), arbitrage managers have underperformed so far in 2021. At the high level, arbitrage performed well during January and February (a period that was challenging for many funds), before suffering a relatively poor March and April. A number of funds were caught in the SPAC sell-off, after having benefitted from buoyant SPAC market activity in previous months. Falling levels of market volatility were an additional headwind for the strategy. Conditions were tougher for volatility arbitrage and 'long vol' oriented strategies, although this was partially offset by stronger performance from the convertibles space.

Macro funds were the poorest performers in H1, driven by lower market volatility, a reduced opportunity set in rates trading (both directional and relative value) and challenges in the emerging market space. Macro funds more oriented towards commodity trading and the reflation theme outperformed.

As one can see in the chart below, the last year has seen a dramatic increase in hedge fund performance dispersion; the differential between top and bottom decile hedge fund performers – as measured by rolling 12-month return – shot up from 25% pre-March 2020 to over 70% and over recent months has started to normalise but still remains at highly elevated levels relative to the last 10 years at just over 50%.

10th – 90th PERCENTILE 12M ROLLING PERFORMANCE SPREAD



Presented on an equally weighted basis

Hedge fund industry performance review cont.

On [pages 8-9](#) there are charts showing the decomposition of cumulative net dollar returns into alpha, beta, and risk free components since January 2013. As one can see, the events of March 2020 saw significant negative dollar performance, the majority of which was a give back of earlier beta gains. What is striking is the amount of industry net dollar P&L driven by performance that is attributed to beta, although this should come as no surprise given the dramatic rise in risk assets that has occurred over the period. P&L dollar generation attributable to performance in credit, equity l/s, event and even macro shows a large proportion of cumulative gains attributable to beta, especially in the last 12 months. However, it is also very noticeable how much beta appears to have contributed to the overall returns of these strategies over a long time period. Minimal returns are attributable to alpha for the long biased strategy. The big positive message and standout from an alpha generation perspective is multi-strategy, with an overwhelming proportion of performance attributable to alpha, even though beta has been a strong driver in the last 12 months. This is welcome news, especially given the higher fees traditionally associated with multi-strategy. Also worthy of mention are the quant and arbitrage strategies, which both have exhibited a very high proportion of alpha generation relative to beta (which has actually been negative over the period), something to keep in mind if one is more sceptical of the prospects for risk assets going forward and the potential negative impact that will have on total returns in other strategy areas.

Sub-strategy performance

Decomposing the event strategy's strong returns, we see that activist event was the best performing sub-strategy in H1 and the primary driver of returns in the event space. Activist funds typically run with a high net exposure and have consequently historically exhibited high beta to equity markets. Although activist funds were among the hardest hit in Q1 last year, they have since enjoyed considerable tailwinds from the buoyant equity markets. Opportunistic event funds have also done very well, while other event sub-strategies were more in line with the broader hedge fund market performance.

As indicated above, the equity L/S strategy experienced significant volatility in Q1, with a number of sub-strategies featuring among the most volatile performers. ELS-Global funds lost 4.6% in January, which was – apart from March 2020 – the worst monthly figure observed by Aurum Hedge Fund Data Engine since the GFC³. The following month the strategy was up over 6.2%, one of the strongest months of the last 20 years. Similar patterns – albeit not as extreme – were witnessed in ELS - US, ELS- European, ELS - Sector and Fundamental EMN. What was interesting was that global and US equity long/short managers made a strong recovery from January and were able to finish H1 outperforming the broader hedge fund industry, while market neutral and sector specialists underperformed, finishing H1 up 2.1% and 2.5% respectively. 2020's top performers, the Asian equity L/S funds finished up 4.9%, marginally underperforming the broader hedge fund industry.

Credit strategies also enjoyed a sustained recovery since the lows of 2020, up every month for the last 12 months. Distressed credit funds drove performance, up just under 13% YTD, with other credit long/short funds performing more in line with the broader hedge fund universe.

Quant strategies' uptick in performance from their lows were driven by risk premia (+7.5% YTD) and CTAs (+7.2%) while other sub-strategies lagged. Statistical arbitrage saw less opportunities as realised volatility levels fell. Quant EMN got hurt in the January deleveraging and was the worst performing sub-strategy that month. The strategy subsequently recovered to finish up 2.2% YTD, but remains a sub-strategy that has struggled for an extended period of time.

Arbitrage, a strategy that performed well in 2020 has struggled in 2021 YTD, with tail protection strategies experiencing negative performance as both implied and realised market volatility has fallen significantly. The more benign volatility environment has also proved a headwind for volatility arbitrage managers. In Q1, opportunistic arbitrage managers did particularly well in January and February (up over 8%), with a number of them involved heavily in SPACs, but then were among the worst performing managers in March (losing 2.6%) and having a less eventful Q2.

Performance

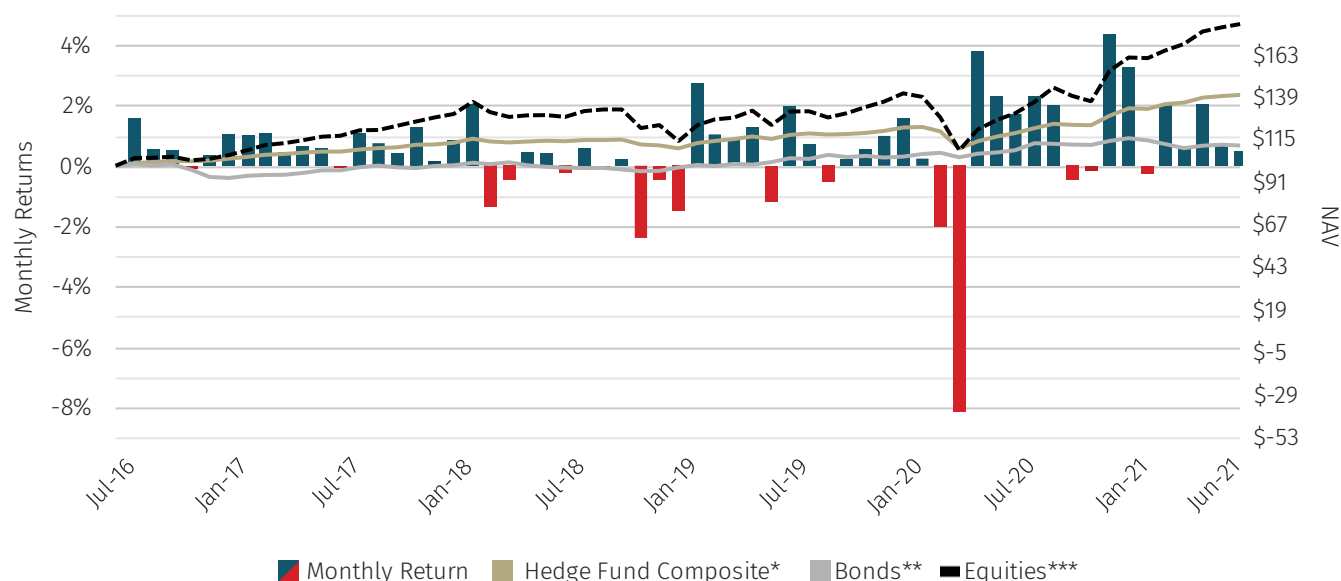
NET RETURN OF MASTER STRATEGIES (1 YR)

Net Performance [†]	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	YTD	12M
Long biased	3.89%	3.26%	-1.80%	-0.67%	7.83%	3.67%	0.47%	1.45%	0.71%	3.10%	1.51%	0.75%	8.24%	26.61%
Event	2.08%	2.57%	0.01%	-0.09%	5.67%	3.78%	0.73%	2.57%	1.58%	2.05%	0.61%	0.45%	8.23%	24.16%
Credit	1.32%	1.30%	0.60%	0.33%	3.29%	1.96%	1.69%	1.60%	0.70%	1.22%	1.03%	0.69%	7.13%	16.86%
Multi-Strategy	1.95%	1.41%	0.77%	0.54%	2.39%	3.26%	-0.32%	3.47%	0.40%	1.51%	0.27%	0.22%	5.64%	16.98%
Equity L/S	2.39%	2.96%	0.00%	0.16%	5.72%	4.51%	-2.20%	4.09%	-0.39%	2.66%	-0.27%	1.35%	5.23%	22.76%
Quant	1.29%	0.01%	-1.25%	-1.00%	0.52%	2.78%	-1.39%	0.81%	1.70%	2.26%	1.12%	-0.16%	4.37%	6.80%
Arbitrage	2.03%	1.06%	0.93%	0.25%	2.09%	2.45%	1.90%	2.25%	-1.11%	-0.62%	0.16%	0.27%	2.84%	12.23%
Macro	1.99%	1.69%	-0.85%	0.18%	2.94%	2.39%	0.03%	0.22%	0.64%	0.88%	0.68%	-0.92%	1.52%	10.23%
HF Composite*	2.30%	2.02%	-0.47%	-0.16%	4.35%	3.25%	-0.25%	2.05%	0.65%	2.04%	0.64%	0.46%	5.71%	18.11%
Bonds**	3.62%	-0.30%	-0.39%	-0.15%	1.99%	1.34%	-1.08%	-1.77%	-2.09%	1.28%	0.49%	-0.39%	-3.55%	2.43%
Equities***	4.90%	5.94%	-3.23%	-2.20%	12.63%	4.86%	-0.21%	2.64%	2.28%	4.15%	1.33%	1.04%	11.71%	38.75%

NET RETURN OF SUB-STRATEGIES (1 YR)

Net Performance [†]	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	YTD	12M
Commodities	1.96%	1.05%	-0.68%	0.35%	2.41%	2.48%	0.94%	4.36%	-0.11%	3.39%	1.49%	2.60%	13.29%	22.08%
Distressed Credit	1.13%	1.64%	0.87%	-0.12%	5.51%	2.56%	2.32%	3.09%	1.59%	2.15%	2.30%	0.90%	12.99%	26.61%
Event - Activist	3.70%	5.20%	-1.18%	-1.17%	13.40%	4.45%	0.26%	4.90%	3.71%	2.43%	0.33%	0.01%	12.11%	41.49%
Event - Opportunistic	2.47%	3.02%	-0.02%	0.05%	6.01%	4.81%	0.69%	2.21%	1.64%	2.72%	0.67%	0.72%	8.95%	27.85%
Long biased	3.89%	3.26%	-1.80%	-0.67%	7.83%	3.67%	0.47%	1.45%	0.71%	3.10%	1.51%	0.75%	8.24%	26.61%
ELS - Other	4.45%	1.52%	-1.29%	0.70%	7.70%	6.29%	1.64%	1.99%	-0.62%	2.09%	1.92%	0.70%	7.96%	30.28%
Risk Premia	1.22%	0.55%	-0.51%	-1.70%	2.27%	2.46%	0.86%	-0.02%	2.72%	1.60%	1.85%	0.64%	7.88%	12.50%
ELS - Global	1.86%	3.72%	-0.44%	0.03%	5.82%	4.73%	-4.57%	6.23%	1.34%	3.21%	0.57%	0.95%	7.65%	25.53%
CTA	2.30%	-0.62%	-1.67%	-0.86%	1.50%	4.48%	-0.85%	2.55%	1.27%	2.67%	1.97%	-0.58%	7.19%	12.66%
Arb Opportunistic	4.11%	2.50%	1.71%	0.46%	3.60%	4.92%	4.17%	4.16%	-2.58%	0.21%	0.00%	1.12%	7.10%	26.92%
ELS - US	2.93%	3.32%	-0.77%	-0.79%	7.56%	4.25%	-2.67%	4.76%	1.13%	3.51%	-0.51%	0.80%	7.05%	25.68%
Event - Multi-Strategy	1.24%	1.48%	0.44%	0.13%	2.40%	2.80%	0.64%	2.00%	1.07%	1.21%	0.78%	0.68%	6.55%	15.88%
Multi-Strategy	1.95%	1.41%	0.77%	0.54%	2.39%	3.26%	-0.32%	3.47%	0.40%	1.51%	0.27%	0.22%	5.64%	16.98%
ELS - APAC	5.60%	2.82%	-0.89%	2.15%	2.81%	5.94%	2.61%	0.83%	-2.82%	2.82%	1.12%	0.67%	5.24%	26.00%
Credit	1.38%	1.18%	0.51%	0.48%	2.52%	1.75%	1.45%	1.04%	0.37%	0.88%	0.58%	0.59%	5.01%	13.48%
ELS - Europe	1.73%	1.43%	0.45%	-1.17%	3.36%	2.57%	-1.57%	2.62%	0.31%	2.44%	0.01%	1.04%	4.88%	13.90%
Event - Merger Arb	1.33%	0.55%	0.74%	0.60%	3.63%	2.86%	2.38%	1.14%	-1.03%	2.46%	0.30%	-0.44%	4.85%	15.39%
Convert Arb	3.25%	2.43%	0.86%	0.76%	2.92%	2.14%	2.30%	2.08%	-0.71%	-0.08%	0.33%	0.19%	4.15%	17.67%
Stat Arb	1.25%	1.63%	0.14%	0.12%	0.16%	2.60%	-1.22%	0.23%	2.05%	2.25%	-0.82%	0.88%	3.38%	9.60%
ELS - Sector	2.01%	3.57%	0.92%	0.94%	6.73%	5.19%	-1.95%	3.75%	-2.27%	1.91%	-1.67%	2.75%	2.36%	23.69%
Quant EMN	1.32%	-0.51%	-2.61%	-2.98%	-3.74%	2.66%	-5.22%	0.28%	3.26%	3.85%	2.06%	-1.74%	2.20%	-3.81%
Fundamental EMN	1.07%	1.07%	0.85%	0.79%	3.18%	3.23%	-2.00%	4.28%	-1.59%	1.59%	0.25%	-0.26%	2.17%	12.98%
Quant Macro/GAA	0.29%	0.23%	-0.68%	0.07%	1.77%	1.43%	-0.54%	-0.06%	0.78%	1.27%	0.27%	0.36%	2.08%	5.27%
Global Macro	1.98%	2.22%	-0.85%	0.23%	3.13%	2.56%	-0.18%	0.70%	1.22%	0.68%	0.56%	-1.47%	1.50%	11.20%
Fixed Income RV	0.83%	1.01%	0.49%	0.27%	0.78%	0.58%	1.27%	-0.96%	1.43%	0.08%	-0.02%	-0.57%	1.20%	5.27%
EM Macro	3.14%	1.22%	-2.26%	-0.06%	4.91%	3.93%	-0.92%	-0.54%	-1.56%	1.78%	1.56%	-0.28%	0.00%	11.20%
Vol Arb	0.78%	-0.18%	0.82%	-0.11%	2.37%	0.55%	-0.60%	1.08%	0.69%	-1.39%	0.52%	-0.30%	-0.02%	4.27%
Tail Protection	-1.08%	-0.84%	-0.68%	0.03%	-4.37%	1.09%	1.05%	-0.59%	-1.69%	-2.02%	-0.47%	-0.82%	-4.49%	-10.01%

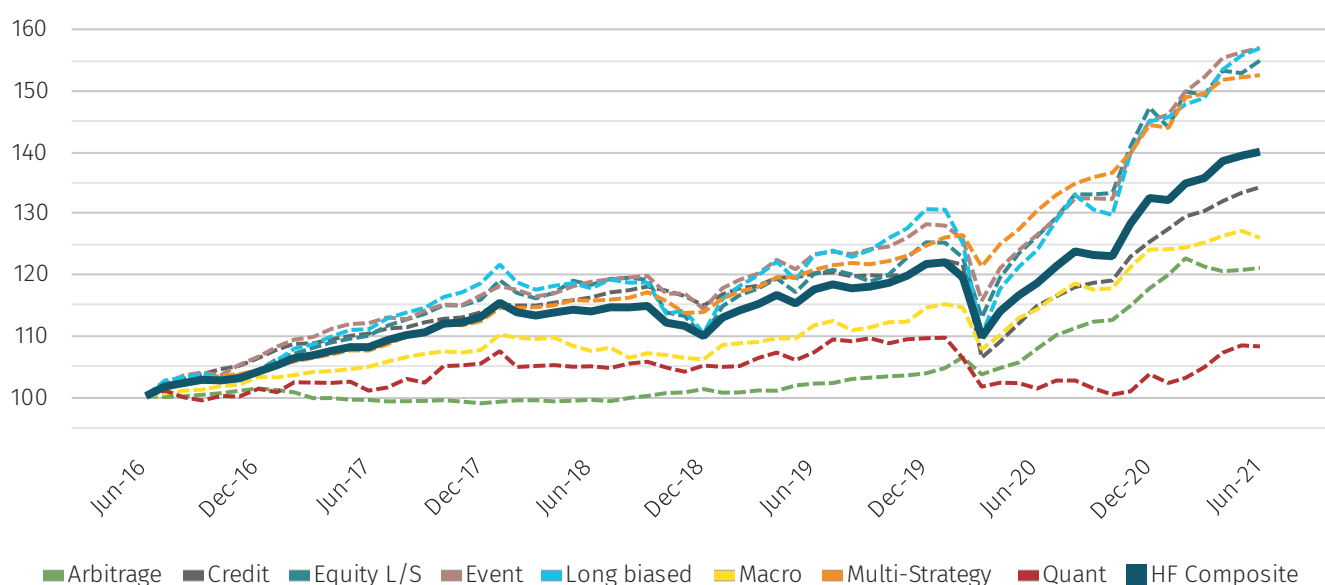
HEDGE FUND COMPOSITE* NET MONTHLY RETURN (5 YR)



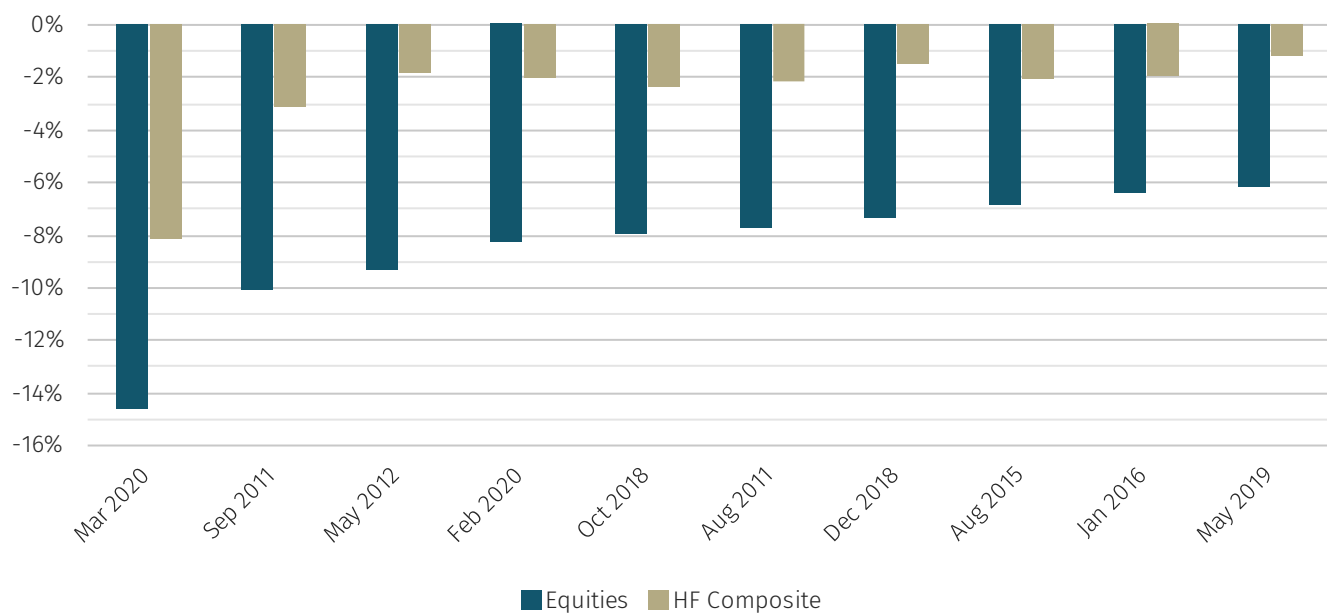
NET RETURN OF MASTER STRATEGIES (5 YR)

Annual Perf	2021 YTD	2020	2019	2018	2017	5Yr CAR	5Yr Vol	5Yr Sharpe
Arbitrage	2.84%	13.36%	2.56%	2.34%	-2.39%	3.87%	2.94%	0.83
Credit	7.13%	3.23%	5.66%	0.97%	7.06%	6.05%	6.59%	0.72
Equity L/S	5.23%	17.58%	14.02%	-5.20%	11.12%	9.13%	7.72%	0.99
Event	8.23%	13.17%	12.12%	-1.90%	9.43%	9.42%	6.32%	1.24
Long biased	8.24%	10.98%	18.42%	-6.93%	13.89%	9.41%	9.48%	0.85
Macro	1.52%	8.32%	7.96%	-1.43%	4.29%	4.70%	4.43%	0.75
Multi-Strategy	5.64%	15.83%	9.55%	1.32%	7.68%	8.80%	3.89%	1.84
Quant	4.37%	-5.36%	4.25%	-0.31%	4.09%	1.57%	4.38%	0.06
HF Composite*	5.71%	8.87%	10.72%	-2.78%	8.62%	6.95%	5.88%	0.94
Bonds**	-3.55%	9.84%	6.19%	-1.20%	7.63%	2.19%	4.81%	0.18
Equities***	11.71%	14.34%	23.65%	-11.84%	21.80%	12.46%	14.89%	0.77

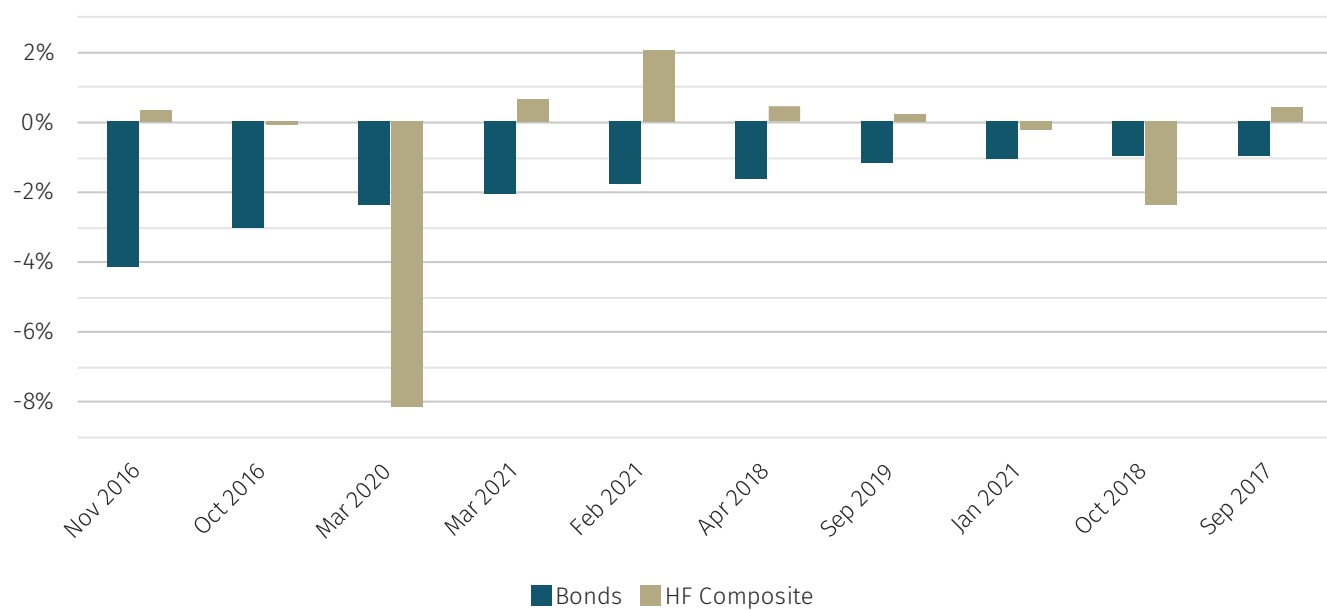
MASTER STRATEGY AND HEDGE FUND COMPOSITE* CUMULATIVE RETURN (5 YR)



PERFORMANCE OF HEDGE FUND COMPOSITE* DURING WORST 10 MONTHS FOR EQUITIES*** (10 YR)

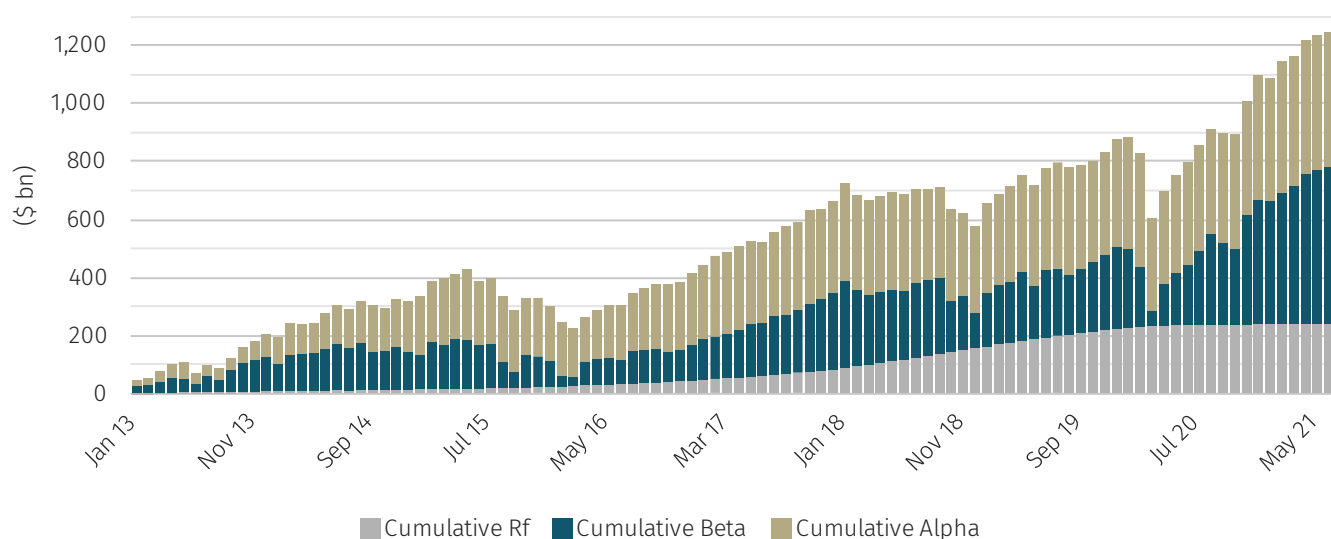


PERFORMANCE OF HEDGE FUND COMPOSITE* DURING WORST 10 MONTHS FOR BONDS** (10 YR)



DECOMPOSING DOLLAR PERFORMANCE INTO ALPHA, BETA AND RISK FREE (RF) COMPONENTS

HF Composite



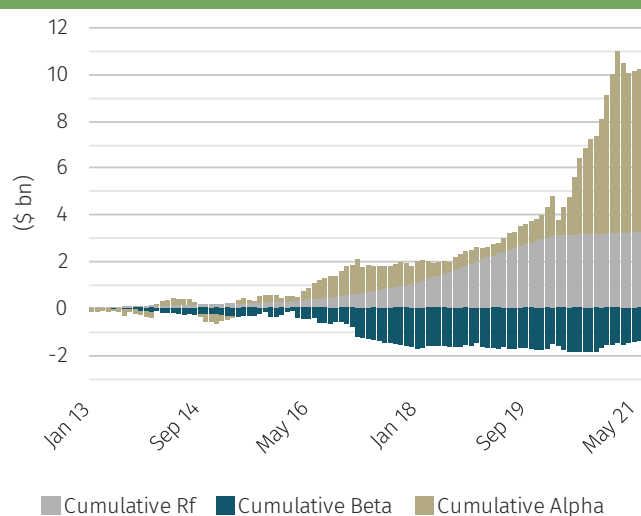
These charts decompose the Hedge Fund Composite dollar returns into beta, alpha and risk free ("Rf") components, as follows: $\alpha = \text{actual return} - R_f - \beta * (\text{market return} - R_f)$.

Where R_f is the risk free rate as defined by a rolling 3m USD Libor, where market return is that of S&P Global BMI ('the market index') and where beta has been calculated with respect to each underlying fund observed on a 24m rolling basis to the market index. The monthly alpha, beta and R_f components are then applied to each underlying fund's dollar performance for a particular month, and then at a master strategy or industry level the individual fund dollar contributions are aggregated up.

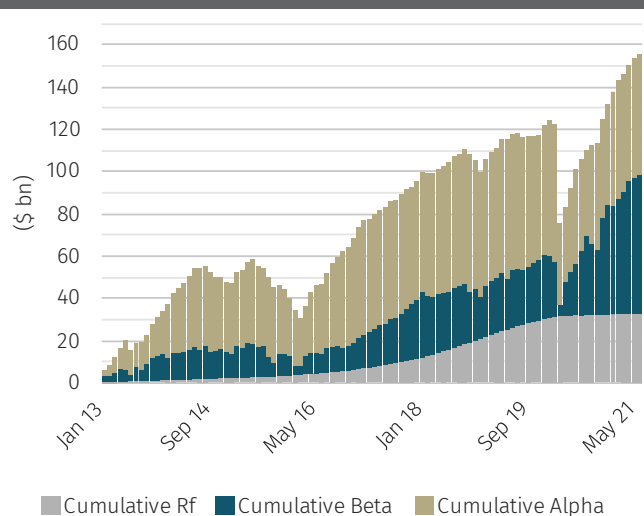
By way of example since 2013 (to June 2021) at the HF Composite level we observe that hedge funds performance generated ~\$1.23trillion dollars (net of fees) to the benefit of investors. Decomposed \$394bn of this are classified as performance attributable to alpha, whilst \$598bn are classified as performance attributable to beta, whilst \$239bn would have been achieved from purely investing in R_f .

For note, beta can be negative in certain cases, creating negative dollar attributions. These are offset by corresponding positive alpha contributions.

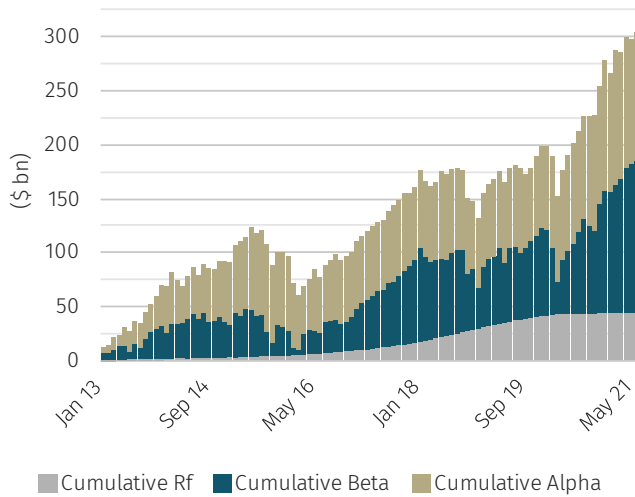
Arbitrage



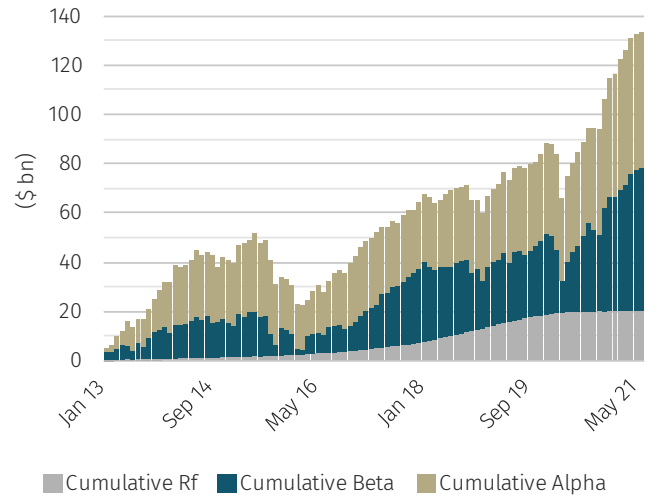
Credit



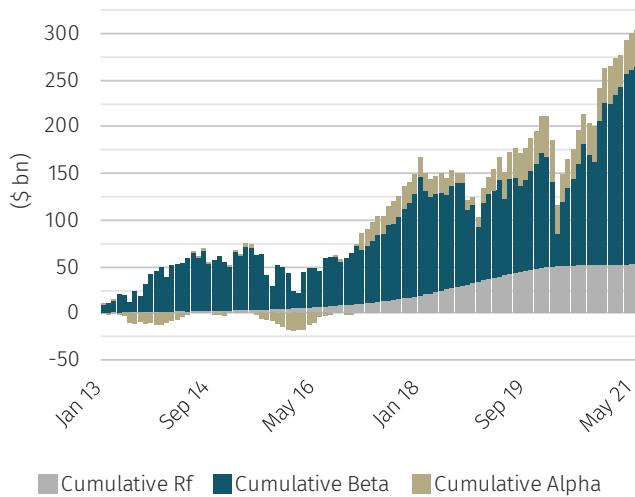
Equity L/S



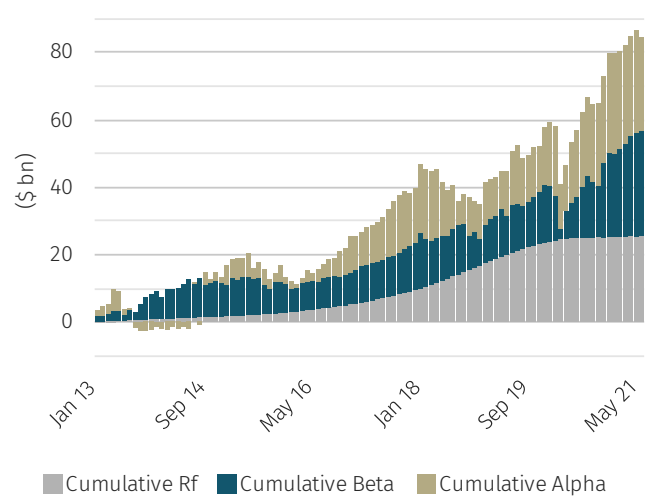
Event



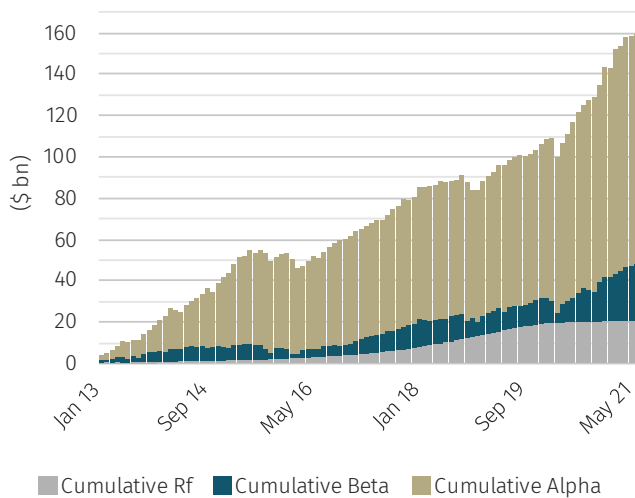
Long biased



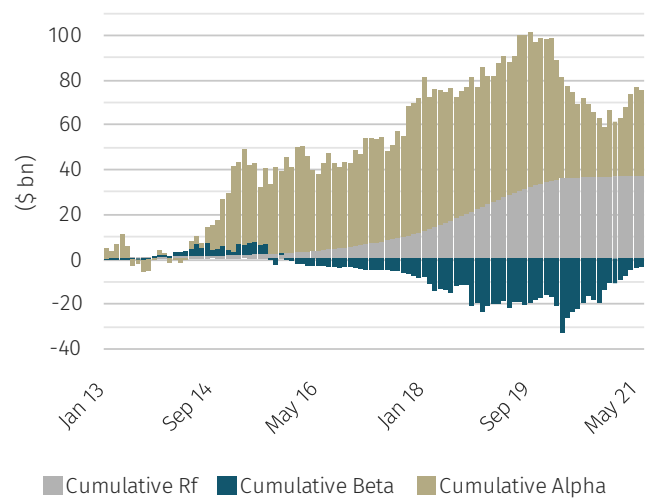
Macro



Multi-Strategy



Quant



Performance Dispersion and Correlation

The correlations between different strategies remains elevated ([page 15](#)) however, these need to be viewed alongside the very high dispersion figures. While the headline correlation figures between different strategies suggests less diversification benefit than one would suppose when mixing exposure to different strategy buckets, the key of course is in picking the right underlying managers within strategies.

As indicated at the start of the report, performance dispersion between top and bottom decile hedge funds moved to extremes in 2020. Despite coming off its highs in the last few months, dispersion remains at extreme levels relative to the last 10 years. This is broadly consistent when looking at dispersion across strategies, although dispersion within the quant space is less extreme than other areas and relative to history.

At the high level – as the charts on [page 12](#) indicate – there has been a very sharp drop off in top decile performers relative to the bottom decile in the last quarter, explaining the compression. The interquartile range has also come in significantly – but still remains elevated as the chart below clearly illustrates.

STRATEGY DISPERSION – ROLLING SPREAD 10-90th PERCENTILE

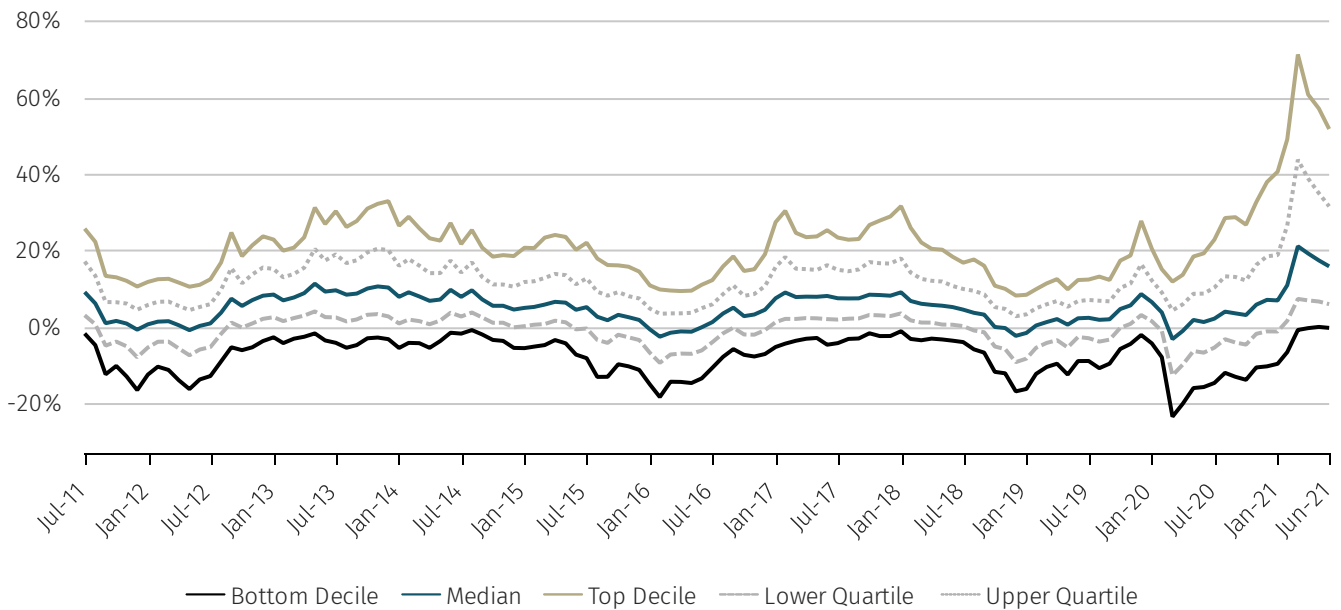
Strategy	Average 10 year	One year to Jun-21	Current elevation vs 10 year average
Event	24.47%	59.62%	143.62%
Equity L/S	30.81%	59.17%	92.08%
Multi-Strategy	22.26%	40.68%	82.73%
HF Composite	28.97%	52.02%	79.56%
Credit	18.28%	32.74%	79.11%
Long biased	34.05%	60.69%	78.22%
Arbitrage	25.57%	39.63%	54.98%
Macro	23.48%	31.30%	33.35%
Quant	24.79%	29.01%	17.03%

Over the last six months we can see the breakdown of dispersion in performance by strategy on P12. long biased and equity l/s both exhibit very wide levels of dispersion, not only between top and bottom deciles, but also between top and bottom quartiles. It is interesting to note that while event was the top performing strategy (on an asset-weighted basis), the long biased outperformed on both a mean and median fund level basis. The mean returning long biased fund is over 10% positive for the year, outperforming the 8% asset-weighted figure, while the median fund is broadly in line. The mean performance of the event strategy marginally outperforms the asset-weighted return, while the median underperforms. Arbitrage strategies exhibit both the lowest median and mean performance, both figures more or less in line with the asset weighted return of just over 2.8% YTD, while macro funds show higher median and mean performance relative to their asset-weighted return of 1.5% YTD. The incidence of asset weighted returns being lower than the mean figures indicates larger funds are skewing the asset-weighted return downwards in these instances.

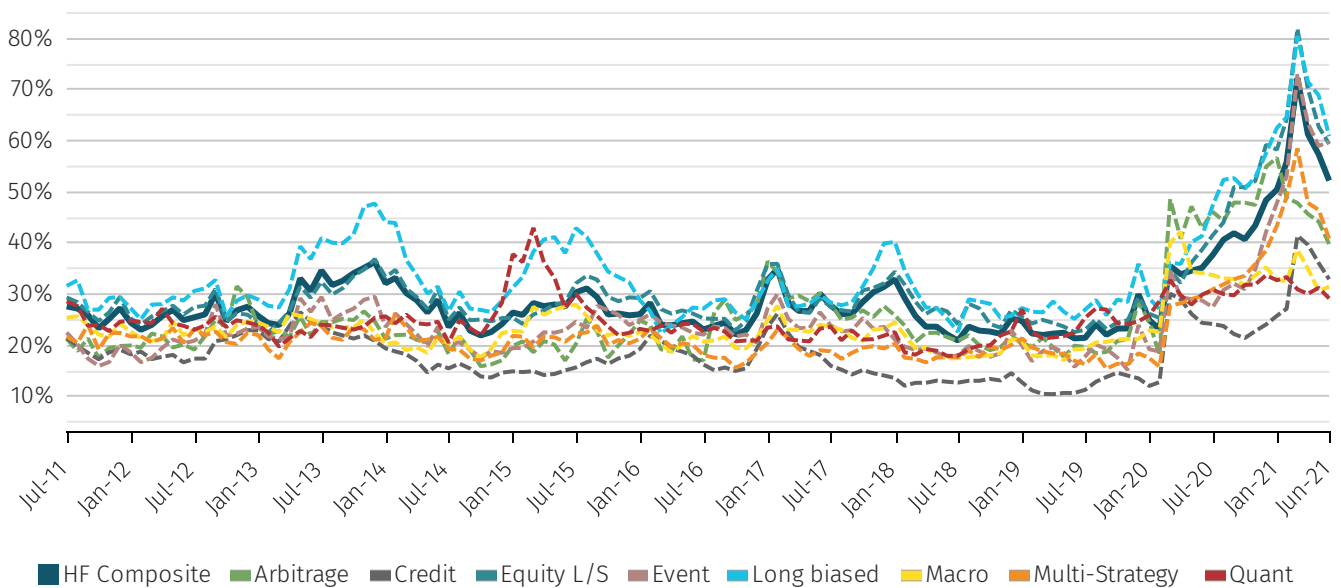
The chart on P14 is also one to note. It shows the average intra-strategy correlation of hedge funds within each strategy classification. For example, on the left-hand-side it shows that the average correlation of volatility arbitrage managers to other volatility arbitrage managers is just 0.1 (over a five year period); but at the other extreme, it shows that the average long-biased fund is over 0.5 correlated to other long biased funds. Intra-strategy correlation is important to look at because it can give an indication of the extent of homogeneity of funds within a certain strategy bucket. So while long biased managers may be top performers in recent months, as a group they exhibit a high degree of cross correlation – which is unsurprising given they are highly likely to carry a lot of common factor risk or beta to the market; as such they are likely to move together. The areas where Aurum typically focuses are more towards the left-hand-side, i.e. macro, fixed income RV, quant, low net equity, etc. These are areas that are more heterogeneous and where one can potentially add a lot more value from manager selection. These are also the areas that tend to exhibit lower beta to bonds and equities ([page 15](#)).

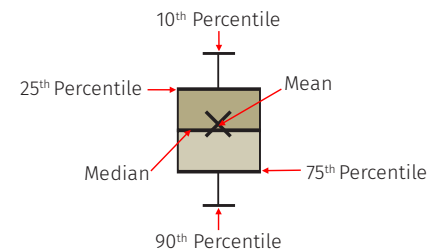
Performance Dispersion

HEDGE FUND INDUSTRY DISPERSION – 12M ROLLING RETURN

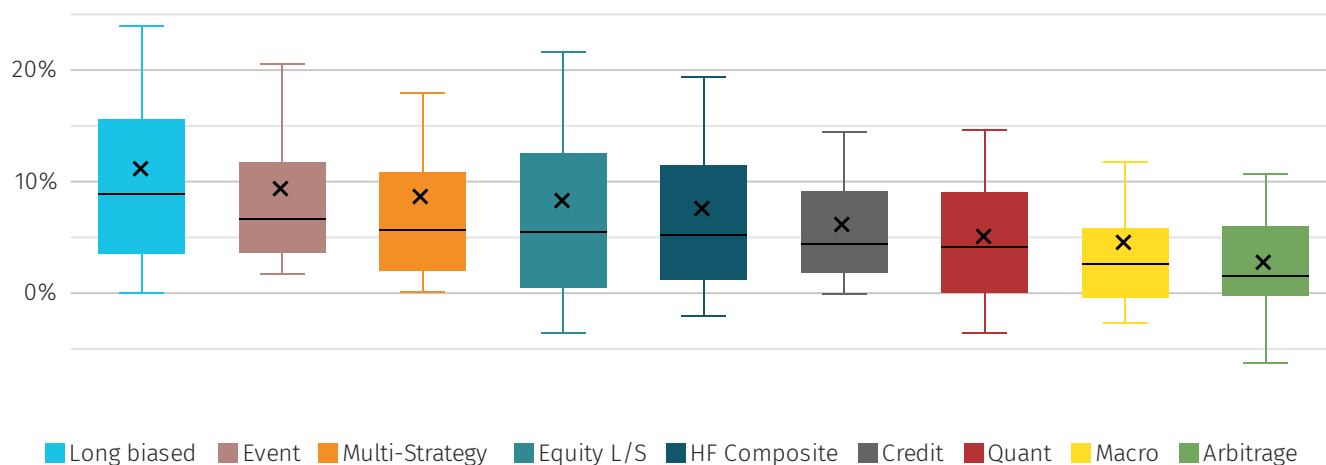


MASTER STRATEGY 10th – 90th PERCENTILE 12M ROLLING PERFORMANCE SPREAD

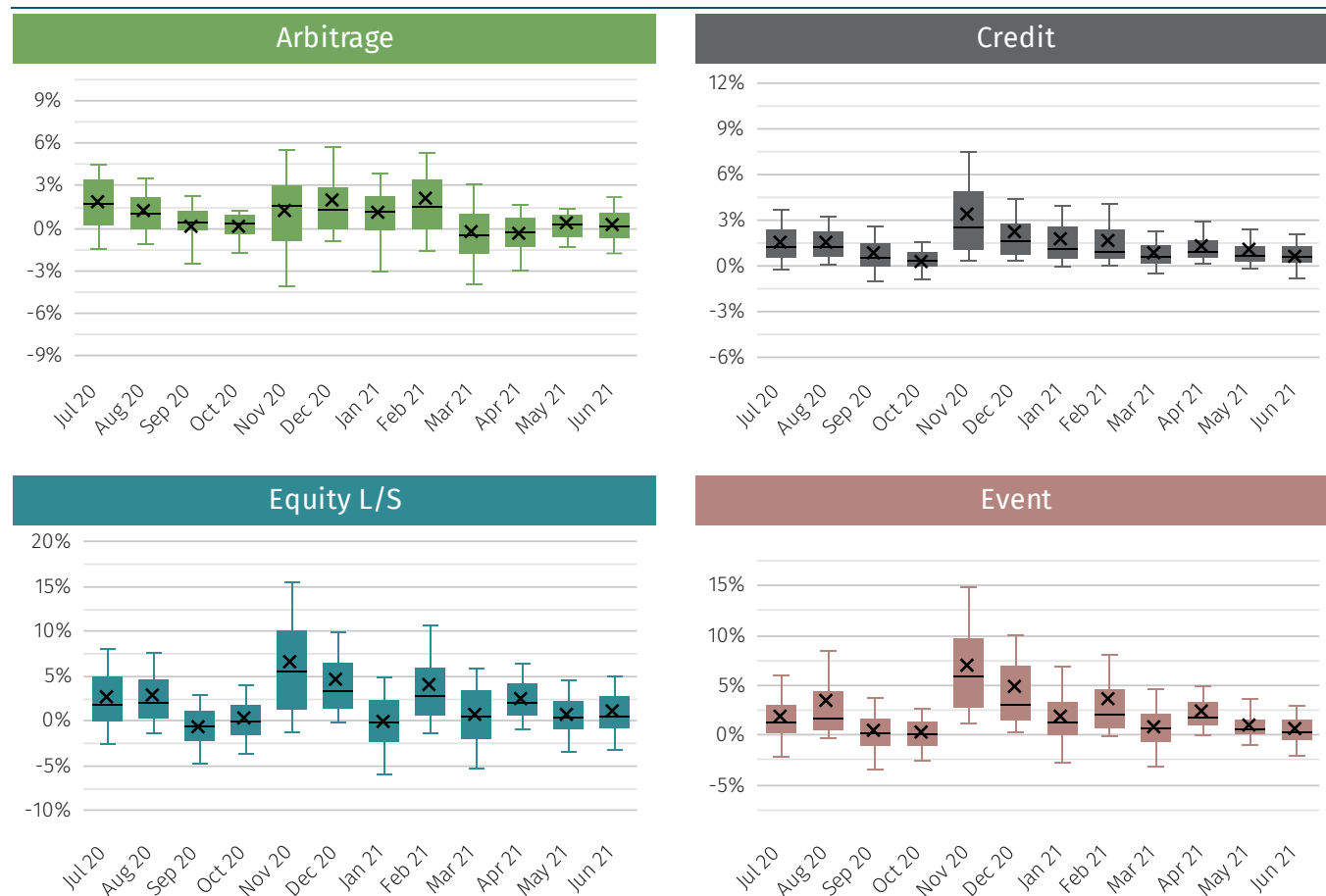




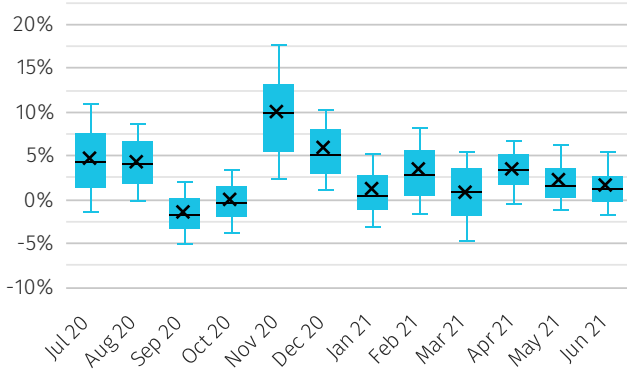
MASTER STRATEGY PERFORMANCE DISPERSION (YTD)



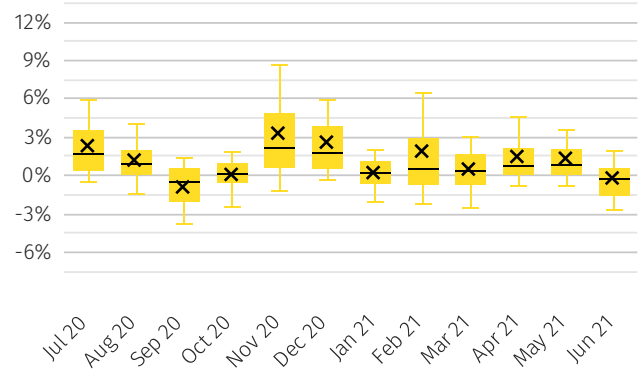
MASTER STRATEGIES NET MONTHLY RETURN DISTRIBUTION



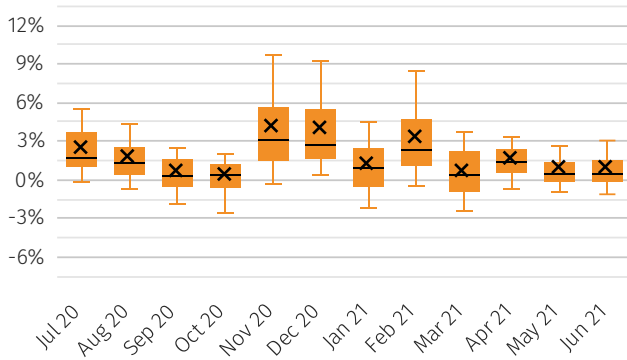
Long biased



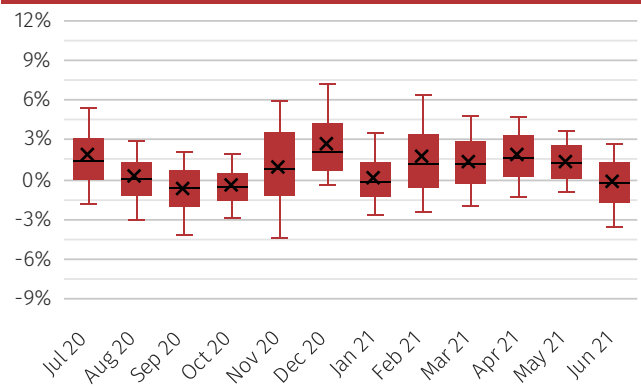
Macro



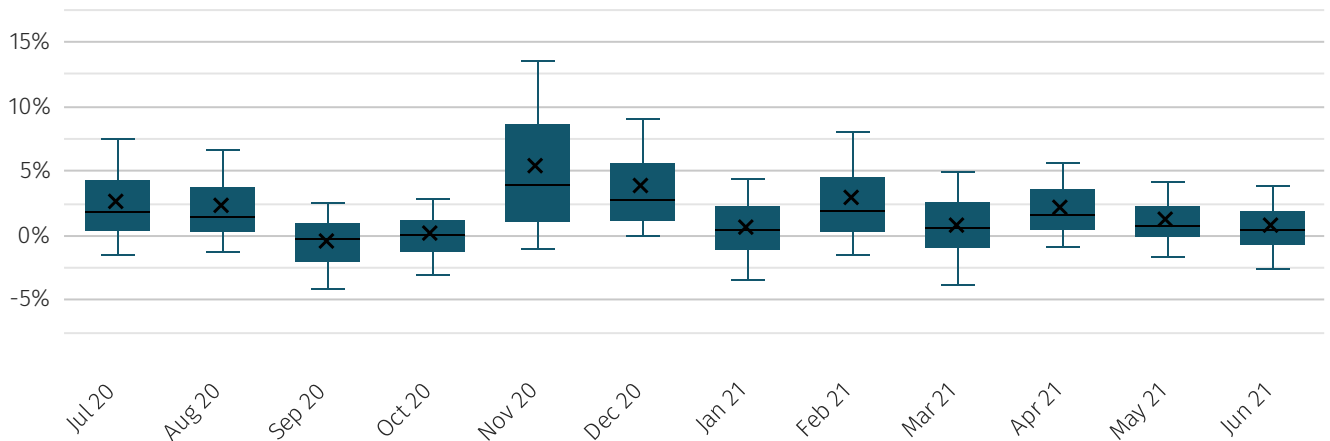
Multi-Strategy



Quant



HF Composite



Correlation

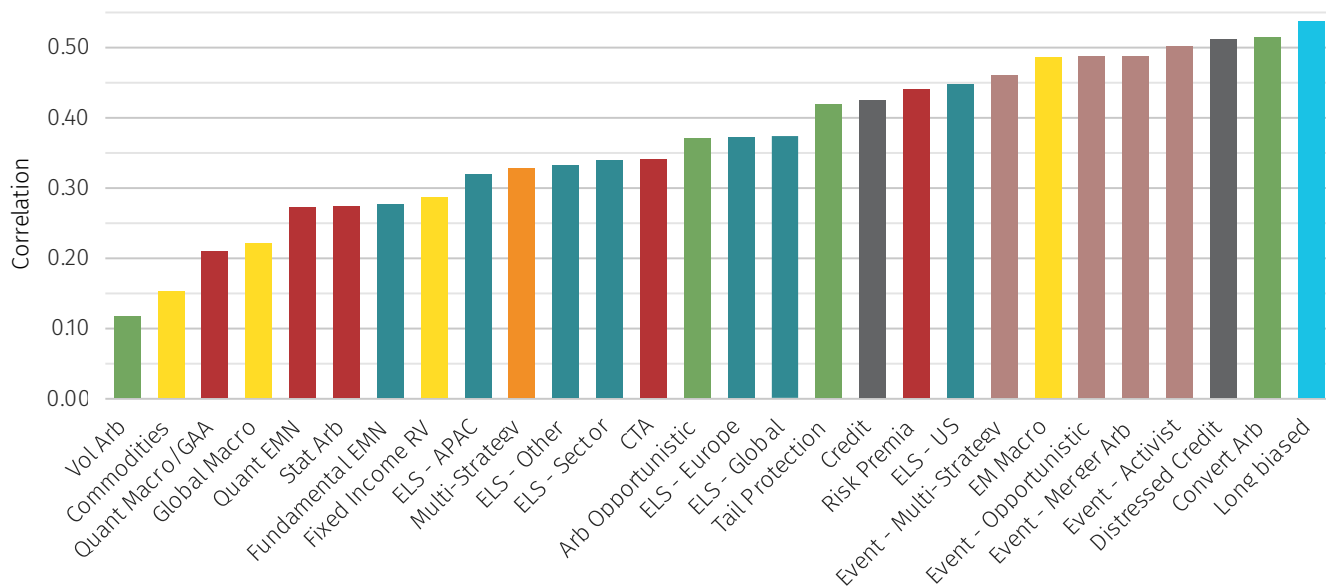
MASTER STRATEGY CORRELATION MATRIX (5 YR)

	Arbitrage	Credit	Equity L/S	Event	Long biased	Macro	Multi-Strategy	Quant	HF Composite	Bonds	Equities
Arbitrage	1.00	0.57	0.39	0.47	0.37	0.46	0.59	0.13	0.45	0.26	0.27
Credit		1.00	0.75	0.86	0.82	0.81	0.77	0.51	0.87	0.28	0.72
Equity L/S			1.00	0.93	0.93	0.77	0.88	0.54	0.95	0.36	0.92
Event				1.00	0.95	0.82	0.84	0.56	0.97	0.28	0.93
Long biased					1.00	0.85	0.79	0.61	0.98	0.42	0.97
Macro						1.00	0.78	0.56	0.88	0.39	0.79
Multi-Strategy							1.00	0.56	0.88	0.38	0.72
Quant								1.00	0.67	0.23	0.58
HF Composite*									1.00	0.39	0.93
Bonds**										1.00	0.33
Equities***											1.00

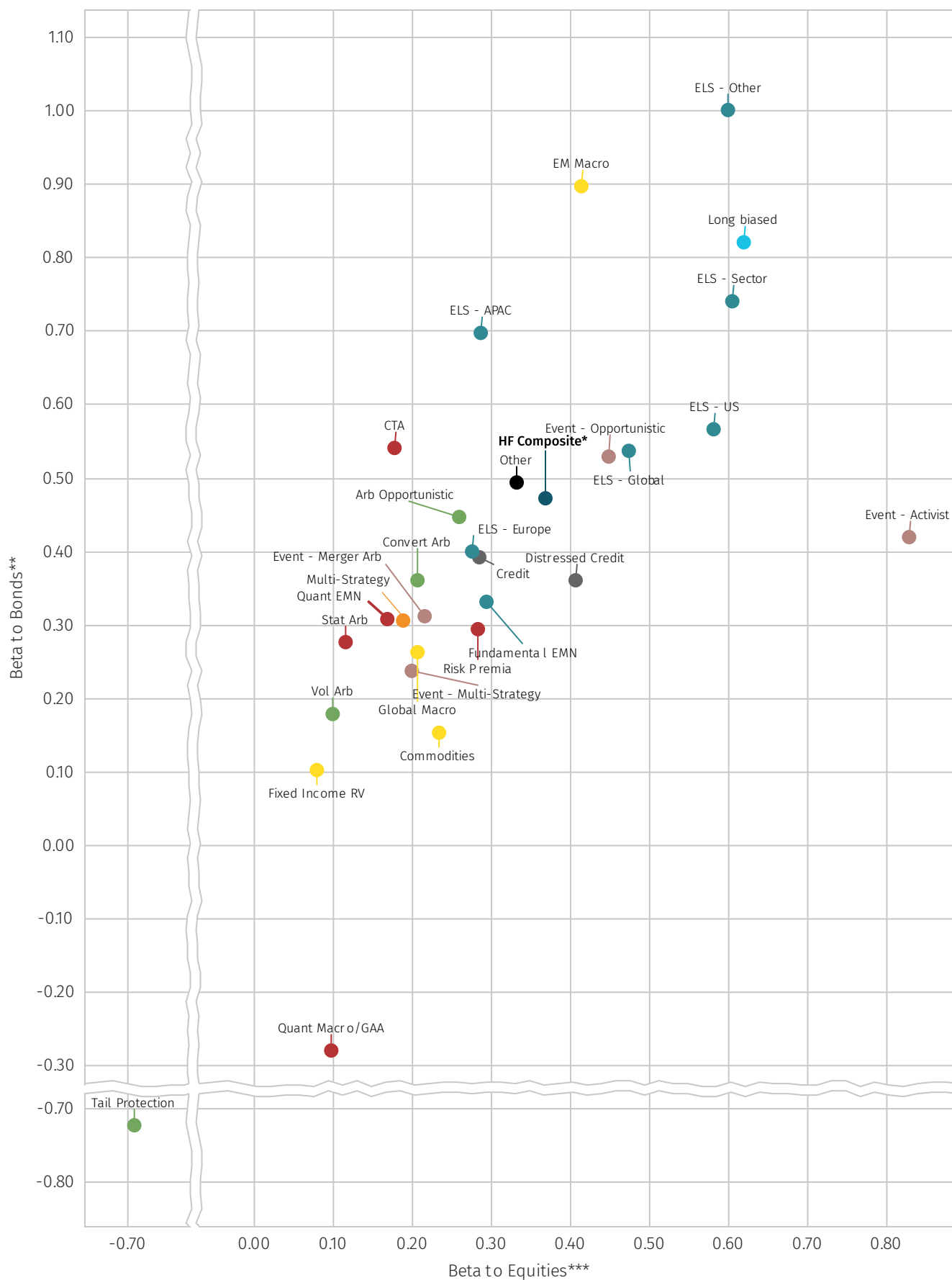
MASTER STRATEGY CORRELATION MATRIX (1 YR)

	Arbitrage	Credit	Equity L/S	Event	Long biased	Macro	Multi-Strategy	Quant	HF Composite	Bonds	Equities
Arbitrage	1.00	0.65	0.48	0.50	0.40	0.42	0.61	-0.08	0.47	0.33	0.34
Credit		1.00	0.66	0.90	0.85	0.73	0.56	0.25	0.82	0.40	0.84
Equity L/S			1.00	0.86	0.78	0.68	0.89	0.51	0.92	0.46	0.79
Event				1.00	0.92	0.86	0.75	0.51	0.96	0.41	0.94
Long biased					1.00	0.89	0.57	0.50	0.94	0.64	0.98
Macro						1.00	0.59	0.56	0.88	0.64	0.86
Multi-Strategy							1.00	0.55	0.80	0.33	0.57
Quant								1.00	0.62	0.36	0.49
HF Composite*									1.00	0.57	0.93
Bonds*										1.00	0.51
Equities*											1.00

AVERAGE INTRA-STRATEGY CORRELATION (5 YR)¹



SUB-STRATEGY BETA TO BONDS AND BETA TO EQUITIES



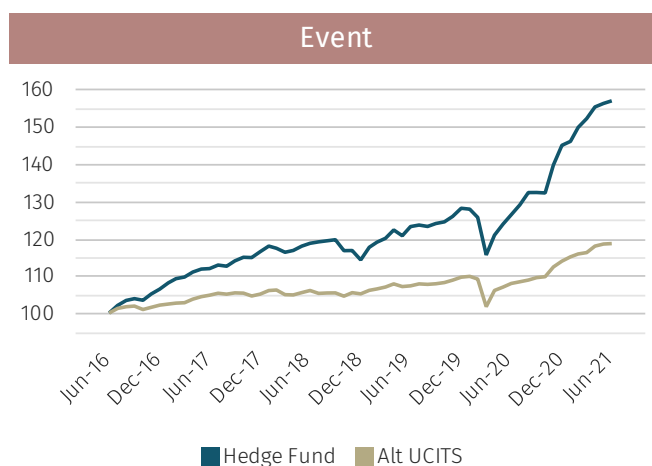
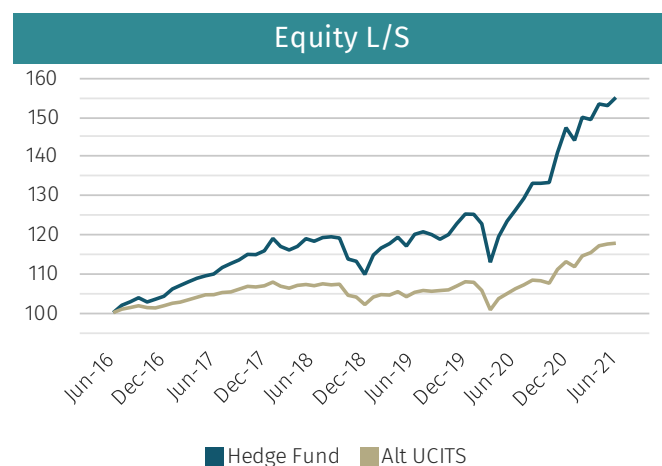
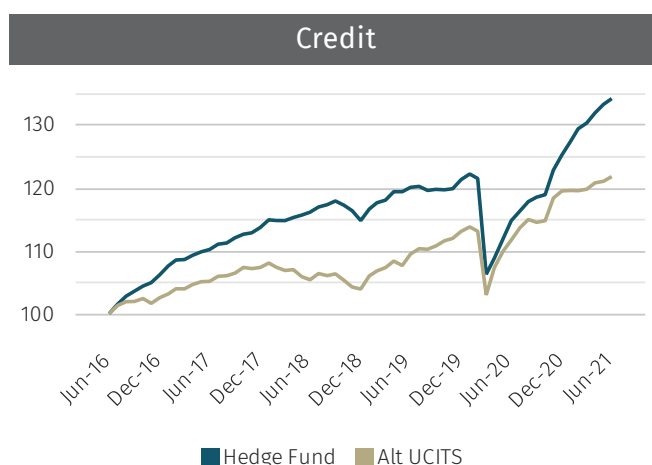
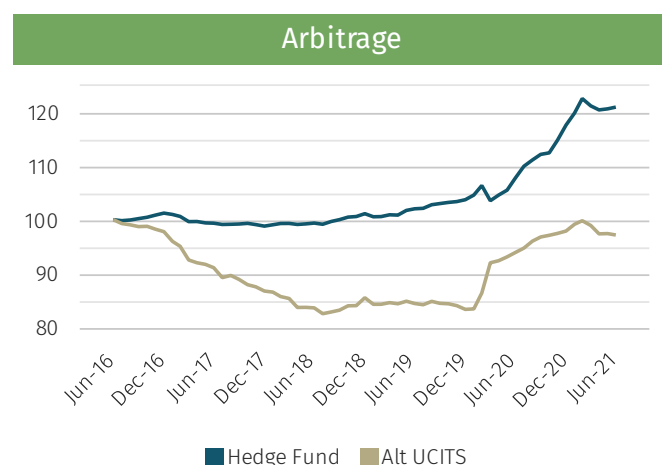
Hedge Funds vs Alt UCITS

The table below presents returns of hedge funds relative to their alternative UCITS counterparts. As can be clearly seen, hedge funds, on average, significantly outperformed their newer, cheaper cousins in 2021 and over a five-year period. While a significant driver of interest in Alt UCITS has been the low fees and promise of comparable returns to hedge funds, the reality has been disappointing.

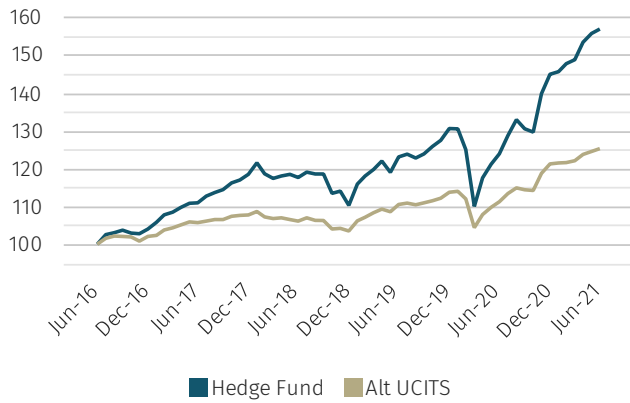
HEDGE FUNDS VS ALT UCITS RETURNS

	2021 Returns		5Y Returns		5Y Vol		5Y Sharpe		AUM (\$bn)		Fund Count	
	Hedge Fund	Alt UCITS	Hedge Fund	Alt UCITS	Hedge Fund	Alt UCITS	Hedge Fund	Alt UCITS	Hedge Fund	Alt UCITS	Hedge Fund	Alt UCITS
Arbitrage	2.84%	-0.75%	3.87%	-0.57%	2.94%	4.54%	0.83	-0.41	56.2	5.2	105	14
Credit	7.13%	1.91%	6.05%	4.01%	6.59%	5.34%	0.72	0.50	401.4	34.6	480	40
Equity L/S	5.23%	4.16%	9.13%	3.31%	7.72%	4.18%	0.99	0.47	592.8	51.8	1,122	138
Event	8.23%	4.14%	9.42%	3.47%	6.32%	4.23%	1.24	0.50	256.6	17.6	223	30
Long biased	8.24%	3.33%	9.41%	4.60%	9.48%	4.94%	0.85	0.65	774.1	244.1	606	85
Macro	1.52%	2.28%	4.70%	3.67%	4.43%	6.96%	0.75	0.35	319.7	40.4	360	58
Multi-Strategy	5.64%	4.51%	8.80%	4.37%	3.89%	4.00%	1.84	0.74	307.0	15.4	172	13
Quant	4.37%	4.62%	1.57%	-0.68%	4.38%	3.67%	0.06	-0.55	397.7	17.5	491	79
HF Composite*	5.71%	3.42%	6.95%	3.61%	5.88%	4.41%	0.94	0.51	3216.2	435.5	3,788	476
Bonds**	-3.55%	-3.55%	2.19%	2.19%	4.81%	4.81%	0.18	0.18	0.0	0.0	0	0
Equities***	11.71%	11.71%	12.46%	12.46%	14.89%	14.89%	0.77	0.77	0.0	0.0	0	0

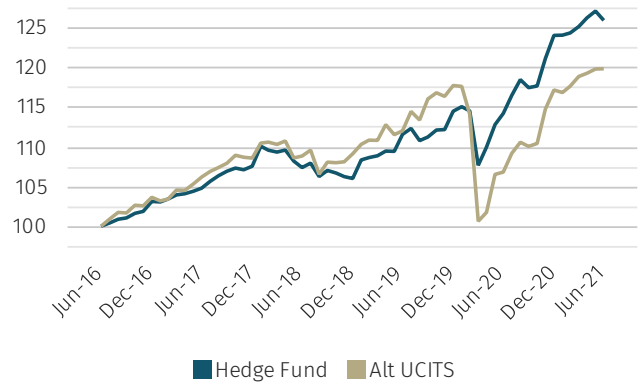
HEDGE FUNDS VS ALT UCITS



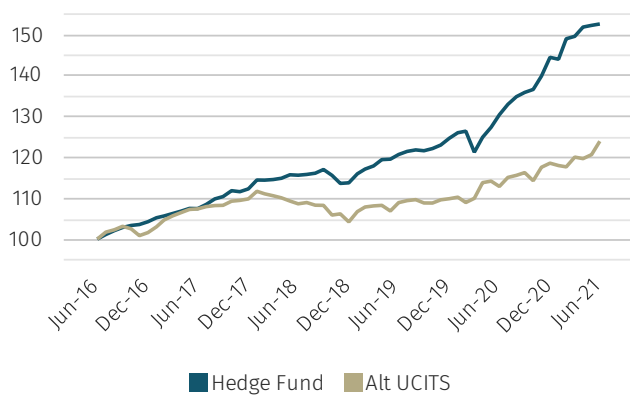
Long biased



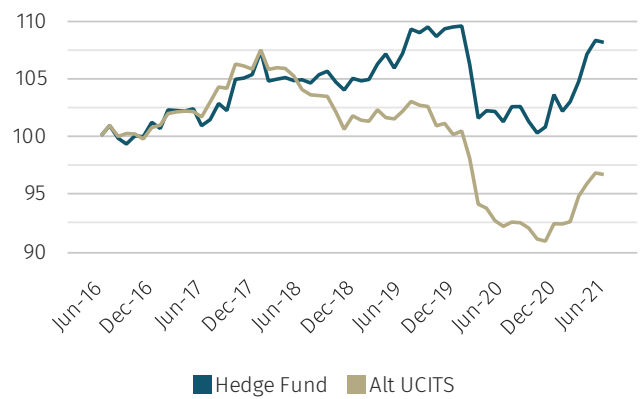
Macro



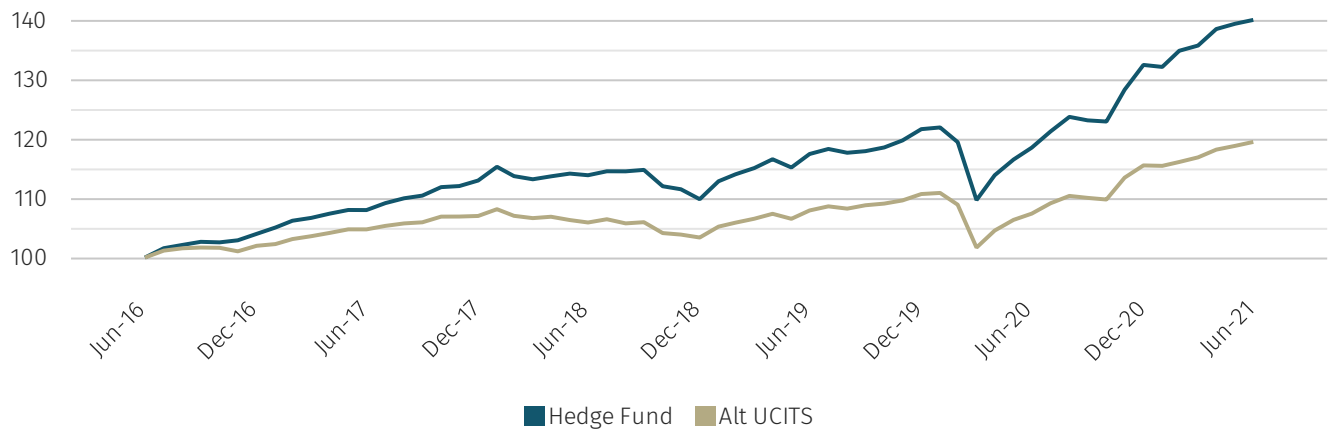
Multi-Strategy



Quant



HF Composite



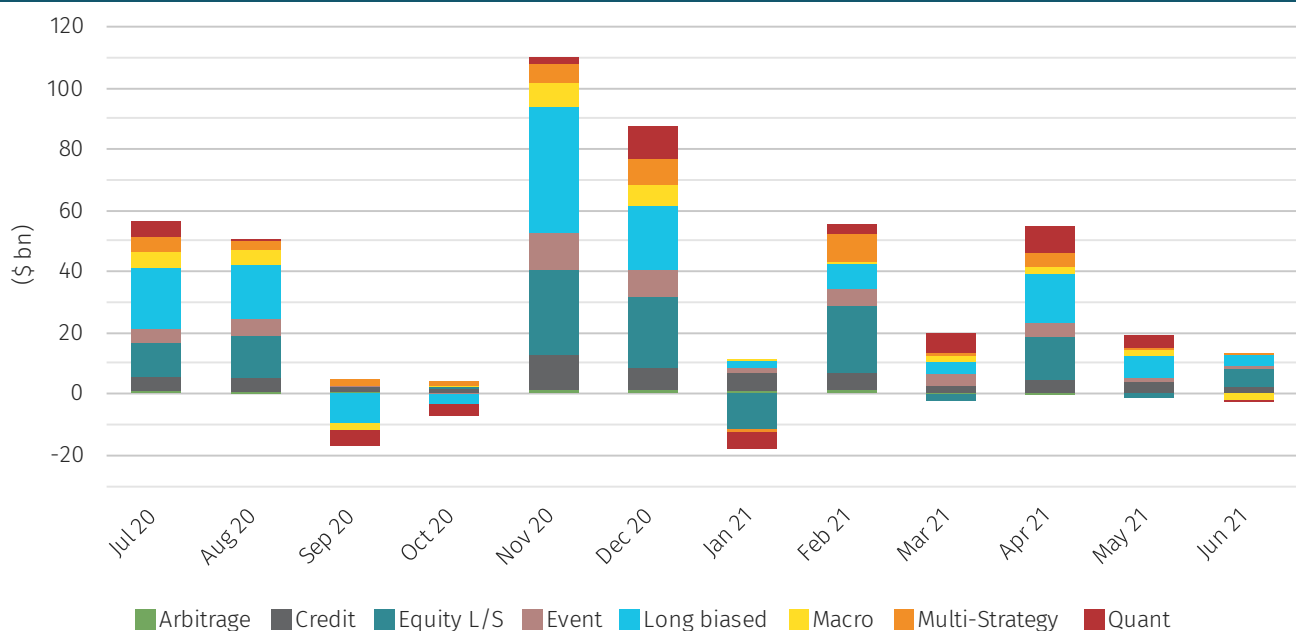
Dollar Extraction

This part of the report describes, in dollar terms, how much has been generated or lost by particular strategies and the hedge fund industry as a whole. There was significant negative performance in January from the 'meme-stock' short squeeze and equity deleveraging, which cost the industry not far off \$20bn. But this was more than recouped in February, with equity long/short and multi-strategy funds in particular doing well, generating around \$30bn between them.

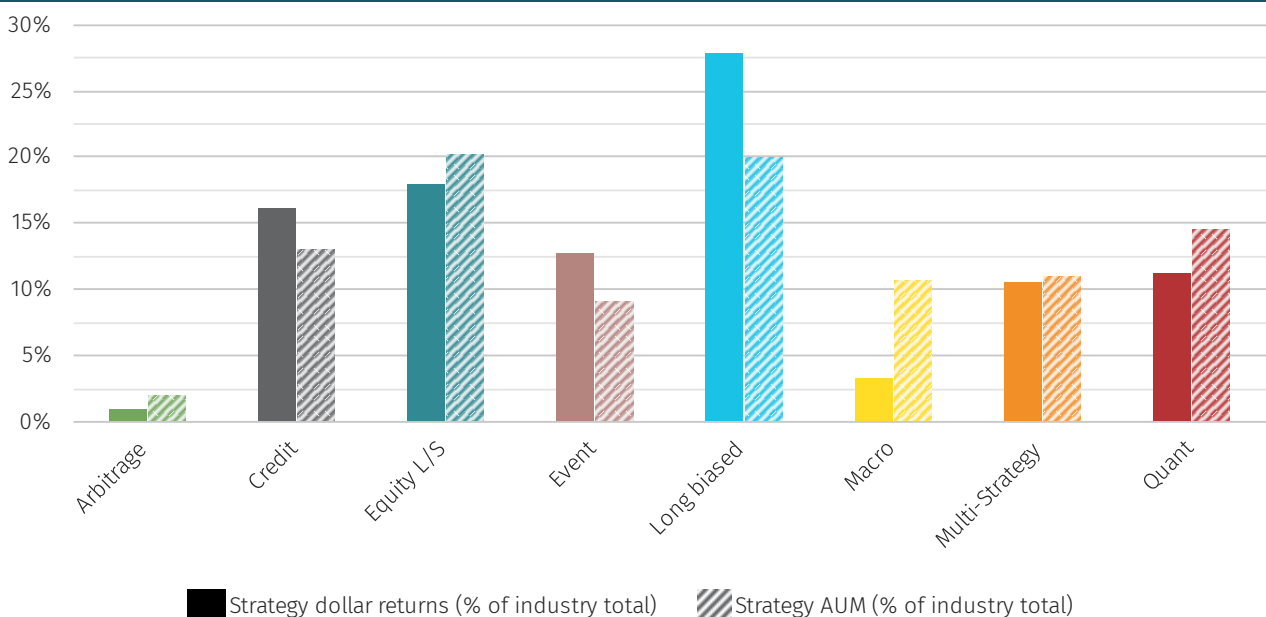
Continuing a theme from the 2020 report, a large proportion of H1 industry P&L is attributable to those strategies more exposed to broad risk asset appreciation. Long biased generated \$40bn, equity l/s over \$25bn, Credit over \$22bn. As already highlighted previously in the report, by far and away the biggest driver of the event driven strategy's P&L YTD has been from activist managers – which have historically been highly correlated with equity markets. Event driven strategies added over \$17bn in net P&L.

Long biased strategies accounted for 20% of industry assets, but 28% of industry net gains. It was a similar story for credit (13% of AUM and over 16% of net gains) and event driven (9% of AUM and 13% of gains). Macro was a significant underperformer, not just on a relative percentage return basis (as discussed earlier in the report), but particularly relative to size. Macro constitutes over 10% of the industry but generated just 3% of gains. Quant also continues a long-term trend of underperforming relative to its industry share.

NET DOLLAR PERFORMANCE BY MASTER STRATEGY (1 YR)



STRATEGY DOLLAR RETURNS AND AUM RELATIVE TO THE INDUSTRY (H1)



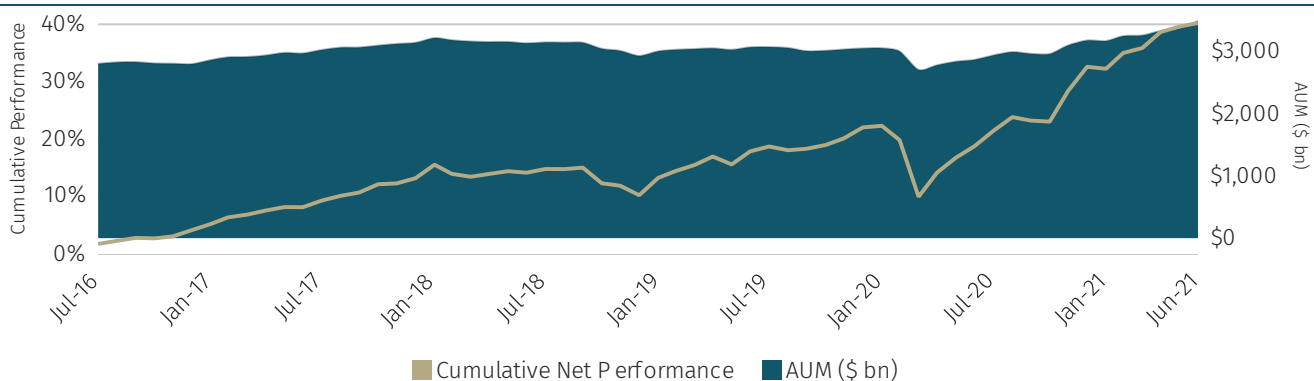
Industry assets, flows and fees

Equity l/s, long biased and credit were the three largest strategies, with credit having overtaken quant since 2020 year-end. These three strategies account for \$1.8tn of AUM, or 55% of the \$3.2tn hedge fund industry covered by the Aurum Hedge Fund Data Engine database. They also account for 2,207 funds out of the 3,557 covered in the H1 report.

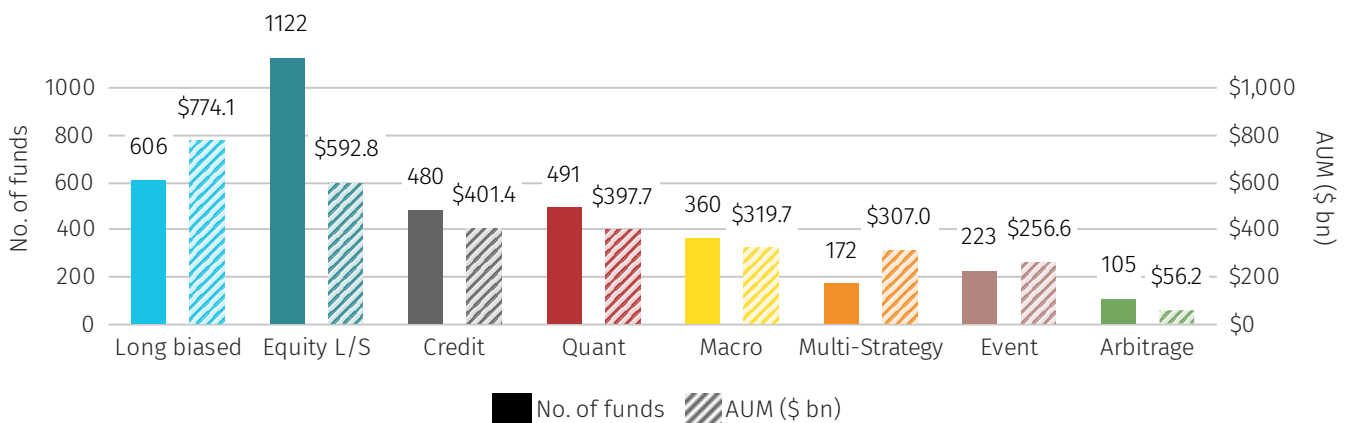
In terms of the changes since December 2020, every strategy except quant has seen net investor inflows. The most significant net inflows have been seen in multi-strategy, approaching an additional \$20bn since the start of the year, while equity l/s has grown \$14bn due to net inflows. It is interesting to see that macro also grew by \$8bn, even though performance has been lacklustre YTD, indicating healthy demand for the strategy. The big 'loser' from a flows perspective was quant, which saw \$13bn of outflows, which counteracted the lion's share of H1 dollar P&L. In terms of total net change in assets, long biased grew the most, almost entirely fuelled by net P&L generation rather than net inflows, while equity l/s also grew substantially, driven by strong P&L as well as the large inflows highlighted above.

In terms of concentration, the multi-strategy, event and long biased spaces have significant exposure to a handful of very large funds. In the multi-strategy space in particular we are aware that many of these large funds are now either closed to new investment and returning profits to investors or changing their liquidity terms to become more onerous.

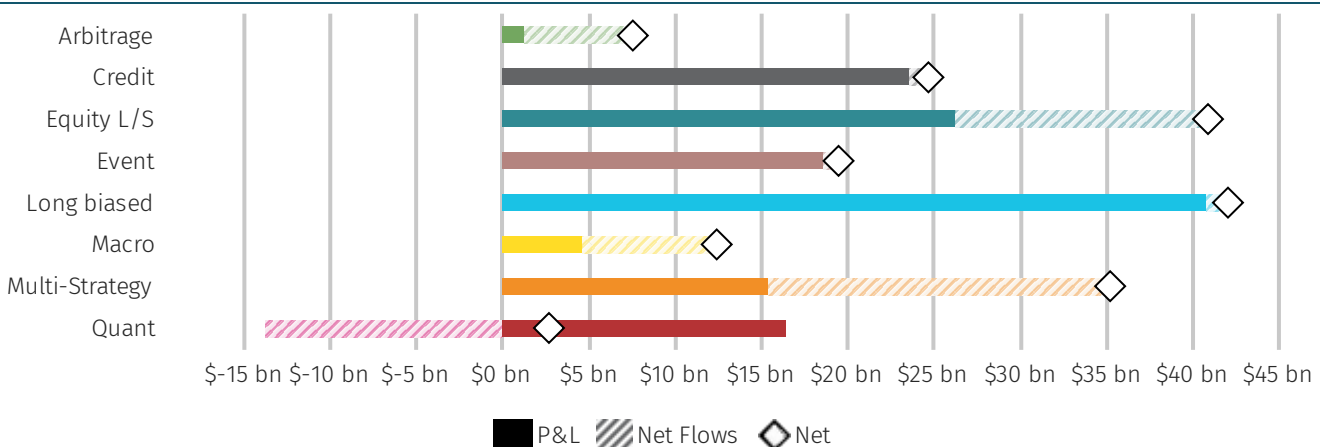
HF COMPOSITE ASSETS (5 YR)*



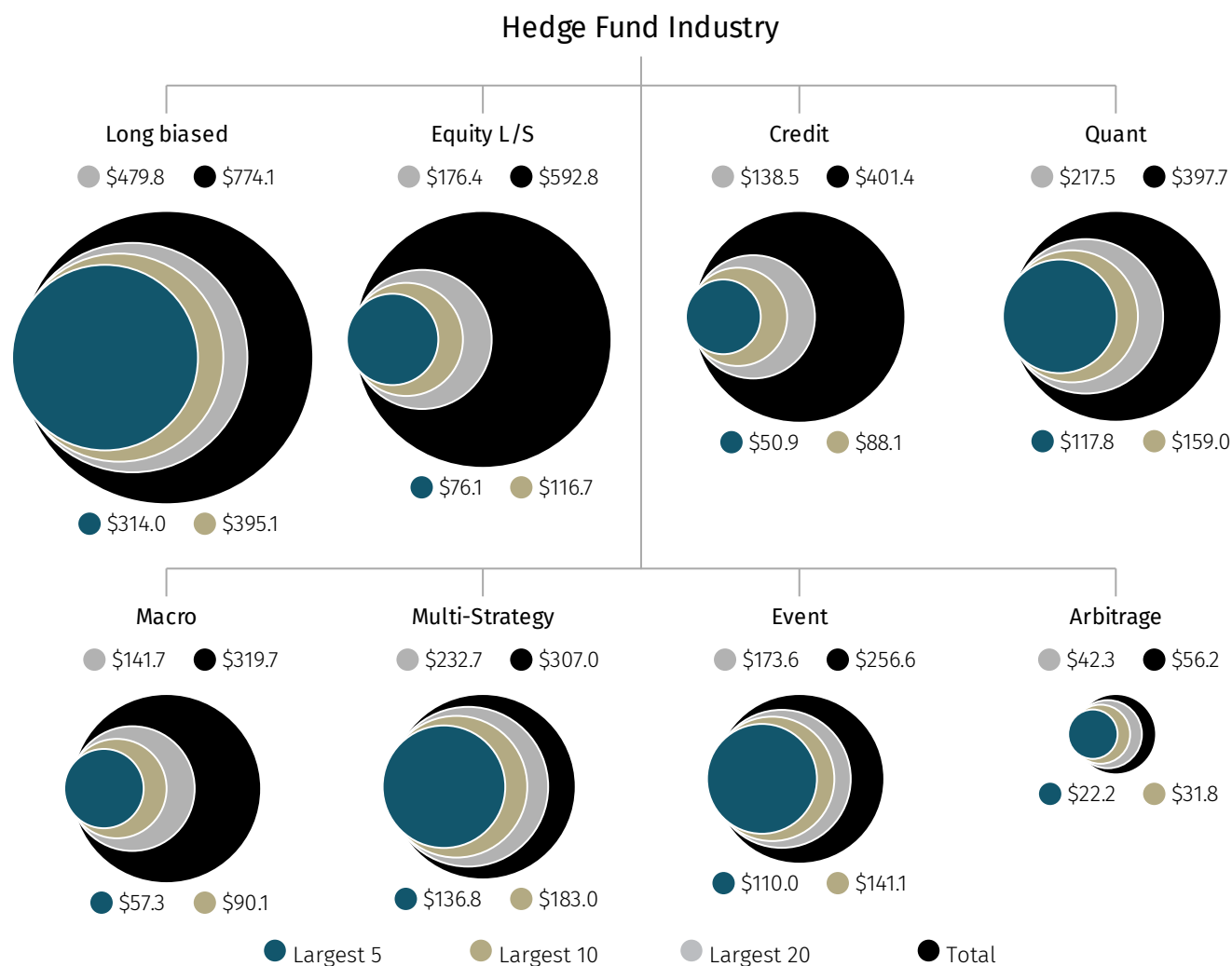
NUMBER OF FUNDS AND AUM BY MASTER STRATEGY



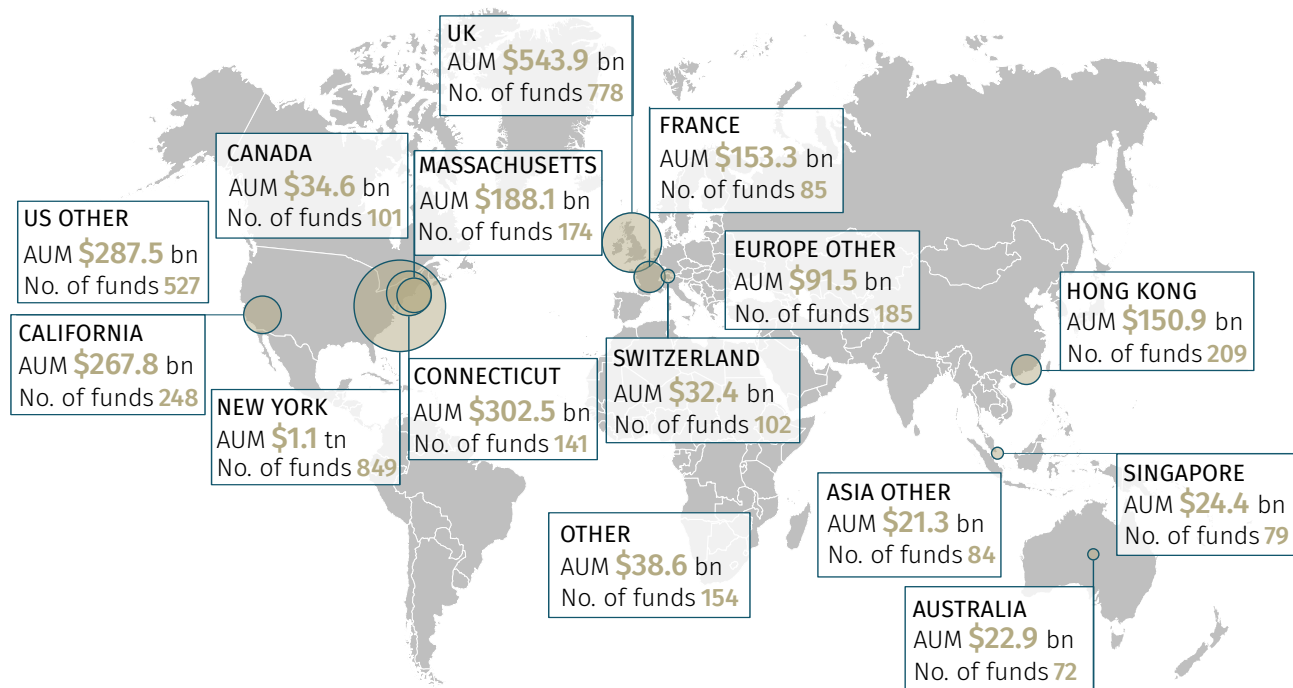
CHANGE IN AUM BY MASTER-STRATEGY (H1)



SUB-STRATEGY FUND CONCENTRATION (\$ BN)



ASSETS UNDER MANAGEMENT BY LOCATION*



TERMS AND CONDITIONS

	Median Redemption Notice (Days)	Median Redemption Frequency	Weighted Avg. Redemption Total (Days) ¹	Weighted Avg. Management Fee	Weighted Avg. Performance Fee
Arbitrage	30	Monthly	111	1.47%	20.37%
Convertible Bond	45	Quarterly	106	1.27%	17.77%
Opportunistic	60	Quarterly	145	1.31%	21.13%
Tail Protection	30	Monthly	57	1.64%	16.62%
Volatility Arbitrage	30	Monthly	97	1.70%	20.89%
Credit	60	Quarterly	161	1.22%	17.46%
Credit	60	Quarterly	129	1.08%	16.05%
Distressed	90	Quarterly	228	1.56%	19.73%
Equity L/S	45	Monthly	137	1.45%	18.88%
Asia Pacific Long / Short	30	Monthly	138	1.61%	19.26%
European Long / Short	30	Monthly	89	1.33%	19.32%
Fundamental Equity MN	30	Monthly	95	1.53%	18.26%
Global Long/Short	45	Monthly	161	1.46%	18.64%
Other L/S	30	Monthly	84	1.31%	15.47%
Sector	45	Quarterly	145	1.58%	18.98%
US Long / Short	45	Quarterly	146	1.28%	19.04%
Event	60	Quarterly	184	1.59%	19.27%
Activist	90	Quarterly	167	1.50%	18.87%
Merger Arbitrage	30	Monthly	62	1.23%	16.59%
Multi-strategy	60	Quarterly	227	1.74%	19.88%
Opportunistic	60	Quarterly	165	1.54%	19.54%
Long biased	30	Monthly	66	0.87%	10.71%
Macro	30	Monthly	95	1.44%	17.71%
Commodities	30	Monthly	57	1.33%	17.64%
FIRV	30	Monthly	108	1.54%	20.29%
Global Macro	30	Monthly	94	1.49%	17.11%
Macro Emerging Markets	30	Monthly	92	1.27%	16.94%
Multi-Strategy	45	Monthly	151	1.82%	20.78%
Quant	5	Monthly	38	1.49%	17.04%
CTA	4	Weekly	25	1.27%	16.28%
Quantitative Equity MN	30	Monthly	47	1.94%	19.57%
Quant Macro/GAA	7	Monthly	34	1.31%	14.69%
Risk Premia	2	Daily	27	0.68%	6.75%
Statistical Arbitrage	30	Monthly	78	2.18%	23.32%

1. Weighted Avg. Redemption Total (Days) is the weighted Avg. of both redemptions notice days and redemption frequency days.

2. Some funds operate a pass through fee structure in addition to, or instead of, a traditional management fee. Aurum does not currently include funds which operate a pass through structure within this management fee calculation (even if they also separately charge a management fee), accordingly the weighted average management fee above excludes funds with this fee structure.

Definitions

ARBITRAGE

Strategies that look to benefit from mispricing's of the same instrument/asset or extremely closely related instrument. The strategy covers the following areas: convertible bond arbitrage, tail protection, volatility or opportunistic trades in this area, including but not limited to other areas such as capital structure arbitrage, ETF arbitrage or arbitrage of other closely related instruments.

Convertible Bond:

Traditionally the strategy looks to isolate mispriced components of convertible securities in order to capture a return to fair value. CB's essentially consist of a bond plus an embedded call option on the equity. Key valuation components relate to the credit (bond component) and the volatility (option and equity component). Those components other than the component believed to be mispriced are typically hedged in order to isolate the mispricing.

Tail Protection:

Strategy that explicitly look to benefit from large market moves, typically either in the form of large spikes in volatility (either from implied or realised volatility), or from significant moves in the underlying spot price (long gamma) or a particular asset or assets. Some tail protection strategies also look to benefit from sudden/large moves in spread relationships, which are typically tight, but which can move to extremes during periods of stress.

Volatility Arbitrage:

Traditionally the strategy looks to identify the mispricing of volatility. Funds may incorporate exposure to factors such as implied volatility, realised volatility, dividends, skew, term structure and correlation. Funds may be biased short, long or neutral to Greek exposures such as delta, vega and gamma.

Opportunistic:

Strategy that look to benefit from inconsistent/mis-pricing of the same instrument/asset or extremely closely related instruments/assets. Opportunistic arbitrage strategies typically have the flexibility to trade across multiple areas, but tend to specialise in a combination of volatility trading, convertible bonds and capital structure arbitrage trades. But they may also focus on other niche areas in order to capitalise upon perceived mis-pricing. The narrow arbitrage focus is why they are better considered as part of arbitrage, rather than in the broader multi-strategy classification.

CREDIT

Strategies that focus the vast majority of their trading on debt instruments, or instruments that are far more 'debt-like' in nature.

Credit:

Typically focusing upon investments in higher yielding (but still performing) non-investment grade securities, primarily corporate - and sometimes sovereign - debt. The strategy is typically expressed with a net long bias. More relative value-oriented credit funds take a more balanced long/short approach (although still typically have a net long bias). Relative to longs, the short positions may be outright, related by sector, and/or within the same capital structures. Whilst not heavily trading oriented (given the associated costs) the strategy is more event-focused than passive and as such tends to have shorter investment horizons than something like the Distressed category. Returns are generated from a blend of coupon income and capital appreciation due to spread tightening (or widening on shorts).

Distressed:

Strategy typically invests in non-investment grade corporate - and sometimes sovereign - debt, which is frequently stressed (e.g., performing, but priced at a significant discount to par) or defaulted (e.g., where a balance sheet restructuring will occur). Some also invest in deeply discounted and/or subordinate structured product. Time horizon is typically longer dated.

EQUITY LONG/SHORT

Investing in global stocks, both on the long and short side. Most funds have a fundamental bias, value and/or growth-oriented investment theses. Some managers may also be more tactical/technical in their approach, taking into account flows, positioning on the street and market dynamics as part of the investment decision making process.

US Equity Long/Short:

Investing the all or the vast majority of their portfolio into US stocks, both on the long and short side. Most funds have a fundamental bias, value and/or growth-oriented investment theses. Some managers may also be more tactical/technical in their approach, taking into account flows, positioning on the street and market dynamics as part of the investment decision making process.

Asia Pacific Equity Long/Short:

Investing the all or the vast majority of their portfolio into Asian Pacific stocks, both on the long and short side. Most funds have a fundamental bias, value and/or growth-oriented investment theses. Some managers may also be more

tactical/technical in their approach, taking into account flows, positioning on the street and market dynamics as part of the investment decision making process.

European Equity Long/Short:

Investing all or the vast majority of the portfolio in European stocks, both on the long and short side. Most funds have a fundamental bias, value and/or growth-oriented investment theses. Some managers may also be more tactical/technical in their approach, taking into account flows, positioning on the street and market dynamics as part of the investment decision making process.

Global Equity Long/Short:

Investing the portfolio in global stocks, both on the long and short side. The fund is agnostic to country/region to maintain flexibility. Most funds have a fundamental bias, value and/or growth-oriented investment theses. Some managers may also be more tactical/technical in their approach, taking into account flows, positioning on the street and market dynamics as part of the investment decision making process.

Fundamental Equity Market Neutral:

Investing the portfolio in stocks, both on the long and short side. To classify as 'equity market neutral' funds are expected to run with a very tight net exposure bias, which over the longer term should be close to zero. Note, different funds use different methodologies, e.g., some may run to be 'beta neutral', while others may be cash neutral (with a tolerance band around the zero level). The distinguishing characteristic is that such funds are typically very low net at all times, but some may run with varying degrees of factor or industry exposure, while others may have more stringent risk parameters around such exposures. Most funds have a fundamental bias, value and/or growth-oriented investment theses. Some managers may also be more tactical/technical in their approach, taking into account flows, positioning on the street and market dynamics as part of the investment decision making process.

Sector:

Investing the portfolio in a specific sector, both on the long and short side. The funds may or may not be agnostic to country/region to maintain flexibility, however sector specialist funds tend to be US focused given that it is a very deep/broad market with sectors that are large enough to accommodate diversified sector specific portfolios. Most funds have a fundamental bias, value and/or growth-oriented investment theses. Some managers may also be more tactical/technical in their approach, taking into account flows, positioning on the street and market dynamics as part of the investment decision making process.

Other L/S:

Long short equity investing, which does not readily fit into the other classification taxonomy.

EVENT DRIVEN

Broad strategy category covering funds that invest in securities of companies facing announced and anticipated corporate events. This includes, but is not limited to: M&A, Spin-offs, Company restructurings, some distressed situations (although if this is the dominating part of the strategy it will be classified as 'credit-distressed'). The strategy identifies mispriced securities with favourable risk/reward characteristics based upon differentiated views of value-unlocking catalysts, event-probabilities and post-event valuations.

Activist:

Activist hedge funds invest in companies that they feel are undervalued and the managers then attempt to drive the value creation process by influencing corporate management to undertake initiatives that they feel will benefit shareholders. This can include a number of activities, including but not limited to: capital structure restructuring, change in operating strategy/capital allocation, change in the board/management, change in corporate governance or the outright sale of the enterprise. Funds typically own large stakes in the companies they invest in as investors need to be a large enough shareholder to influence management.

Merger Arbitrage:

Strategy typically involves taking positions in the securities of a company being acquired in a merger or acquisition. Due to the risk of a deal-break as well as time value of money, the securities typically trade at a discount to the deal-price/value (deal-spread). Primary risk is when deals break, which can lead to asymmetric losses to the downside. Funds will typically trade cash deals and also share-for-share deals, where the fund will short the securities they expect to receive upon deal closure (locking in the deal spread). In addition to M&A, managers may also invest in other situations that involve process driven catalysts.

Multi-strategy:

Whilst these are funds investing across multiple strategies, they are characterised by their overwhelming focus on the broad event-driven space and therefore placed in their own category. Such funds consistently generate a significant portion of their P&L from the primary event-driven investing categories: merger arbitrage, soft-catalyst event-driven situations (spin-offs, spin-outs, share-class arbitrage, non-mandatory shareholder elections, index-rebalancing, holdco/subsidiary relative value trade, high probability potential merger 'targets', etc.) and/or activist investing. Some funds may also allocate a portion of their capital to Distressed (which can fall under the category of event-driven investing), however, if the majority of the risk is in consistently in the distressed arena, it falls under the 'credit/distressed' categorisation.

Opportunistic:

Has some similarities to the event-driven 'multi-strategy' classification however, as the name suggests, these funds tend to be very opportunistic and dynamically adjust their capital allocation between various event-driven trades. These funds tend to also be more value and soft catalyst oriented. Such funds may also place 'special situations' trades, looking to unlock value taking various positions in the capital structure (i.e., could be debt or equity). Opportunistic funds have the flexibility to trade all areas of the event space (M&A, Activist, soft catalyst and distressed investing) but will do so on an opportunistic basis, they also may concentrate a large portion (or even at times all) of the risk in a specific area, unlike event driven - multi-strategy funds, which are typically always allocated across multiple sub-strategies at all times.

LONG BIASED

Long only or overwhelmingly long-biased strategies. Covers multiple asset classes.

MACRO

Macro funds take positions (can be either directional or relative-value) in currencies, bonds, equities and commodities, based on fundamental and qualitative judgements. Investment decisions can be based on a manager's top-down views of the world (e.g., views on economy, interest rates, inflation, government policy or geopolitical factors). Relative valuations of financial instruments within or between asset classes can also play a role (or be the dominant part) in the investment process. Primary areas of focus are the liquid instruments of G10 countries, although they may also include emerging markets.

Fixed Income Relative Value:

Fund generates all or a substantial majority of the P&L/risk from relative movements across fixed income assets and their derivatives. Funds are typically looking to profit from arbitrage, mean-reversion or positive carry. Most traders aim to be either duration neutral or 'risk neutral' (i.e., matching DV01 across long and short positions). Most managers incorporate some use of leverage as an integral part of the strategy. Note - that some managers in the space may also trade a smaller portion of the book in more 'classic' directional macro trades, but funds in the FIRV category are generating a minority of the risk from this area.

Commodities:

These funds are primarily focused on trading commodity futures and options from both the long and short side. They can occasionally include the tactical use of equities, currencies, or fixed income instruments, but commodity futures/options should make up the bulk of the risk. The manager is typically looking for longer term trends and supply/demand imbalances within and between commodity markets.

Global Macro:

Macro funds take positions (can be either directional or relative-value) in currencies, bonds, equities and commodities, based on fundamental and qualitative judgements. Investment decisions can be based on a manager's top-down views of the world (e.g., views on economy, interest rates, inflation, government policy or geopolitical factors). Relative valuations of financial instruments within or between asset classes can also play a role (or be the dominant part) in the investment process. Primary areas of focus are the liquid instruments of G10 countries, although they may also include emerging markets. Macro managers that do not have a particular specialisation in areas such as commodities, emerging markets or fixed income relative value fall under this more general classification.

Emerging Markets:

Macro funds take positions (can be either directional or relative-value) in currencies, bonds, equities and commodities, based on fundamental and qualitative judgements. Investment decisions can be based on a manager's top-down views of the world (e.g., views on economy, interest rates, inflation, government policy or geopolitical factors). Relative valuations of financial instruments within or between asset classes can also play a role (or be the dominant part) in the investment process. Primary areas of focus are the emerging markets.

MULTI-STRATEGY

A hedge fund where the capital is deployed across multiple strategies and asset classes. Funds are typically extremely diversified and employ multiple PMs/risk taking groups.

QUANT

Systematic strategies: Funds trade securities based strictly on the buy/sell decisions of computer algorithms. Quant strategies primarily fall into the following categories: Quantitative Equity Market Neutral, Statistical Arbitrage, Quant macro/GAA (Global Asset Allocation), CTA, and risk-premia.

CTA:

CTAs (Commodity Trading Advisors) take primarily directional positions in index level or macro instruments, such as futures or FX contracts, in a systematic fashion. Technically, a CTA is a trader of futures contracts as defined by the CFTC and historically, there were many CTAs who were not systematic; such traders are more likely to be classified as 'Global Macro'. CTAs are

typically extremely systematised with straight through processing from signal generation to execution. Many, but by no means all, CTAs are trend following (using historical prices to determine predictable 'trending patterns') buying into markets where prices are rising and selling where markets are falling. When rising markets slow down/stop rising, trend-followers typically reduce its position and will eventually reverse its position into a short position, which it will hold until the market starts to rally again. The strategy is known for running with profits and cutting losses. Other models used in CTAs may include carry, seasonality, mean reverting or pattern recognition systems, models driven by fundamental data or non-traditional data sources. Some CTAs can also trade very short-term signals driven by market microstructure anomalies and patterns.

Quant Macro / GAA:

GAA (Global Asset Allocation) is a systematic approach to Global Macro, with managers taking positions in global markets based on quantitative analysis, taking in information based primarily on economic data, but also incorporating price related information. The strategy is highly data and technology intensive. The positions tend to be relative value based, but they may also take directional positions in instruments such as futures, FX and baskets of equities, ETFs, swaps and other instruments. Signals may be arranged into relative value asset class models, cross asset class models / directional trades. Signals are also often classified under a number of factor headings: value, carry, momentum etc.

Statistical Arbitrage:

Statistical arbitrage funds typically take price data and its derivatives, such as correlation, volatility and other forms of market data, such as volume and order-book information to determine the existence of patterns. These patterns can help the manager forecast the future return of a stock, often over a relatively short timeframe. Typical signal types are: mean-reversion, momentum and event-driven. Mean-reversion looks to take advantage of the phenomenon of short-term price movements occurring due to supply/demand imbalances then moving back to an equilibrium level. Momentum models look for patterns in price data that suggest that price movements will be more persistent (i.e., trend). Other statistical arbitrage funds will look to incorporate more discrete information into their process from events (e.g., publishing of analyst earnings estimates, news flow, etc.). Whilst statistical arbitrage funds tend to focus more on 'technical' models, some may also incorporate some longer-term models that are driven by fundamental data (e.g., stock value models, growth, etc.), however, if these models are the more dominant driver of risk, then the fund is likely to be classified as Quantitative Equity Market Neutral. Statistical arbitrage funds are typically run with a very low level of beta and are market neutral, however, this may not always be the case, with some funds able to take significant directional risk; however, given the higher frequency trading nature of such funds, they are not expected to have significant correlation to markets over time.

Quant Equity Market Neutral:

Traditional QEMN strategies take fundamental data, such as analyst earnings estimates, balance sheet information and cash flow statement statistics, and systematically rank/score stocks against these metrics in varying proportions. The weights of the scores of the different fundamental data sources may be fixed or dynamic. Managers may construct a portfolio using an optimisation process or by applying simpler rules combined with risk constraints so as to create a portfolio that is dollar and/or beta neutral, and typically with minimal sector exposure. Traditional QEMN portfolios consists of exposure to: Value (looking for stocks mispriced relative to their fundamental value, e.g. based on P/E, P/B, cash flow, etc.); Quality (looking at metrics such as levels of debt, stability of earnings growth, balance sheet strength); momentum (looking at past returns over a preset timeframe ranging from days to months); however, these are common factors that are relatively easy to exploit/replicate - hence the proliferation of risk-premia products that operate in this space.

Risk Premia:

Hedge fund risk premia products typically seek to capture the fundamental insights of a class of hedge fund strategies (hedge fund risk premia / alternative risk premia) along with a meaningful proportion of the expected returns those strategies can earn - using a dynamic but clearly defined process. Funds typically have exposure to a well-diversified portfolio of hedge-fund premia. Premia can cover everything from equity premia (Equity market neutral - trading across value, quality, growth and momentum factors, as well as EM premia), macro premia (e.g., trend following, or EM premia), to arbitrage strategies (e.g., risk arbitrage - holding a portfolio of merger targets diversified by sector and deal type; convertible arbitrage, etc.). The strategies are typically very well understood, backed up by academic research and implemented systematically.

Bond and equity indices

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