



# Investor Positioning and Flows

## Positioning Unwinding Only Slowly

### Months-long defensive rotation in flows gathering steam

The safety bid in flows continued this week, with large outflows from equity (-\$10bn) and HY (-\$3bn) funds, but inflows to other bond (+\$10bn) and money-market funds (+\$12.9bn). Equity funds have now seen outflows of -\$132bn ytd and -\$237bn since December. Outflows over the last 6 months in dollar terms have now been larger than over any prior 6-month period. As a percentage of AUM they were exceeded only by those seen around the 2008-09 recession and the European financial crisis. By contrast, bond funds have seen inflows of \$220bn ytd, close to the largest on record over comparable periods in the past, and money-market funds have seen inflows of over \$107bn just in the last 5 weeks, in what is usually a seasonally weak period. With trade tensions ratcheting higher yesterday we are likely to see the safety bid strengthen further.

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### Equity positioning has been declining only slowly

- Equity futures positions have been declining slowly and remain elevated and near the top of their historical range.
- Vol Control funds will remain sellers as vol rises on the latest selloff. Since the end of April, Vol Control funds have sold net \$13-\$15bn in equity exposure and if the S&P 500 were to sell-off an additional -2% on Monday, they would have another modest \$5-7bn to sell. With allocations still on the higher side, the risk is asymmetric to the downside. CTAs also have begun selling as near-term triggers are hit. We still believe the CTA complex is net long S&P 500, but with lighter positioning versus 2018 sell-offs. Additional selling likely if short-term MAs cross long-term MAs, which requires spot to stay low for the next few weeks. Risk Parity funds have mostly not reacted to the sell-off yet but do have significant beta to the S&P 500. Equity L/S is down only -2% in May, with low net and gross exposure going into this sell-off.
- Amongst other indicators, put/call ratios have risen sharply, and retail sentiment is now below its normal range and approaching extremes. In the past when retail sentiment fell below the normal range, the market remained flat over the following 1 month but rose over 3m (+4%) and 6m (+5%) periods.

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### Equity markets now pricing in growth slowing further

With the sell-off this week, the S&P 500 has now declined below levels indicated by current growth indicators (ISM) and is now pricing in a further slowdown (ISM at 52), which, as we noted last week, was on the cards even before trade tensions flared up this month ( [Catching Down To Slowing Growth, May 24 2019](#) ). Leading indicators point to the ISM dipping below 50, and the S&P 500 in turn declining to about 2650.

### Sharp decline in bond yields suggests large short positions now completely unwound

While Eurodollar futures positions turned long mid-April, overall bond futures positions had remained short. The sharp decline in yields this week, however, suggests that shorts might have been completely unwound or positions even turned outright long. Bond yields are in line with current growth indicators (ISM).

### Oil positioning now cut to the middle of its historical range but overvaluation remains high

After being at the top of their historical ranges in April, oil positioning as well as overvaluation has been falling sharply. The latest oil selloff suggests positioning has now fallen to the middle of its range, with a typical cycle seeing them fall all the way to the bottom. With the dollar continuing to drift higher over the last few weeks, oil prices remain overvalued (+20%) on our medium-term valuation framework and the risk is to the downside.

## Positioning details

- **CTAs sold some S&P 500 on today's move below the 200d MA.** Spot moved down through its 200d MA at 2775.84 today, triggering selling from some CTAs. We still believe the CTA complex is net long S&P 500, with lighter positioning versus 2018's sell-offs. Additional selling likely if short-term MAs crossed long-term MAs, which would require spot to stay low for the next few weeks. CTAs remain long USD versus DM currencies and long US Treasury bonds across durations, both of which are relatively crowded trades.
- **Vol Control funds will be sellers on Monday,** as these strategies take 2-3 days to de-risk from today's moves. Since the end of April, Vol Control funds have sold net \$13-\$15bn in equity exposure. If S&P 500 were to sell-off an additional -2% on Monday, Vol Control would have an additional \$5-7bn to sell. But these funds have been selling then buying for most of May as the market had some significant 1-day moves down followed by volatility quickly moderating. Risk is still asymmetric to the downside if volatility metrics spike more significantly due to the heavy equity allocations.
- **Risk Parity funds have mostly not yet reacted to the sell-off,** as these strategies are slow moving. It is possible that some PMs with more discretion de-risked, but we believe most have significant beta to the S&P 500 sell-off. With 1M vol of the cross asset portfolio only at 5, the negative correlation between equities and bonds continues to offset some of the pick-up in equity volatility.
- **Equity L/S is only down -2% in May,** with low net and gross exposure going into this sell-off. YTD returns are +4.9%, off from a high of +7%. Popular single-stock longs have performed in-line with popular single-stock shorts. And the recent Momentum rally has not significantly impacted returns given the Hedge Fund complex's relatively flat exposure to the factor.

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## CFTC update:

- **US equities:** Net positioning in US equity futures fell only slightly and remains elevated
- **EM:** MSCI EM futures longs continued to slide this week. In EM FX, MXN longs were very elevated early this week (as of Tuesday) and have likely fallen sharply after the announcement of tariffs on US imports from Mexico. RUB long positioning fell while BRL shorts rose.
- **Commodities:** Oil net long positioning continues to fall and is now in the middle of its historical range. Short positioning in copper and long positioning in gold rose further.
- **FX:** Long positioning in the trade-weighted dollar was flat this week. Shorts in GBP rose further but those in the Euro, Swiss Franc, CAD fell modestly. Shorts in the yen and AUD rose slightly
- **Bonds:** Long positioning in Eurodollar rates continues to climb higher. Shorts in the 5y, 10y and 15-25y fell sharply but rose slightly in the 2y while those in the very long maturity bonds were unchanged.

## Fund flows details

### Outflows from equities return after just a week of respite

- **Equity funds** experienced large outflows (-\$10.3) this week, mostly from the US (-\$8.4b), Europe (-\$1.8b) and Asia ex Japan (-\$1.7b), while Japan attracted \$1.9b in inflows. Broad-based global funds (-\$0.3b), global EM funds (-\$0.1b) and Latam (-\$0.1b), too, saw outflows although at moderate pace. European equity outflows were at their slowest pace in 16 weeks, and were driven both by domestic (-\$1.3b) and foreign (-\$0.5b) flows. In Japan, on the other hand, domestic investors pumped in \$2.4b, while foreign investors pulled out -\$0.4b. China funds saw outflows continue (-\$1.7b) as it continues to bear the brunt of trade concerns, while India funds got their biggest inflows (\$0.3b) since early 2018 after the election results showed a strong renewed mandate for the incumbent administration.
- **All sector funds**, with the exception of Utilities (\$0.4b) witnessed outflows with Health Care (-\$0.9b) leading the way. Among other sectors, Financials saw -\$0.3b in outflows, Industrials Materials, Tech and Consumer Goods saw outflows of -\$0.2b each, while Energy and Real Estate saw outflows of -\$0.1b each. This was the 12th straight week of outflows from Energy funds. Defensive oriented equity funds (\$0.8b), which we define as flows to dividend funds (\$0.4b), low vol (0.3b) funds, Utilities, Real Estate and Consumer Staples sector funds, got their biggest inflows in 11 weeks.
- **Across size funds**, large cap funds (-\$4.6b) suffered the most outflows this week, but outflows from mid-cap (-\$0.9b) and small cap funds (-\$0.6b) continued for the 11th successive week, taking their cumulative outflows over the period to -\$7.5b and -\$7.9b respectively.
- **Across style funds**, both growth (-\$0.9b) and value funds (-\$0.9b) witnessed outflows this week.

### Bond and money-market funds continue to benefit from the risk-off sentiment

- **Bond funds** continued to get inflows (\$6.9b) as strong inflows drawn by DM funds (\$7.4b) could only be marginally offset by outflows from EM

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funds (-\$0.4b).

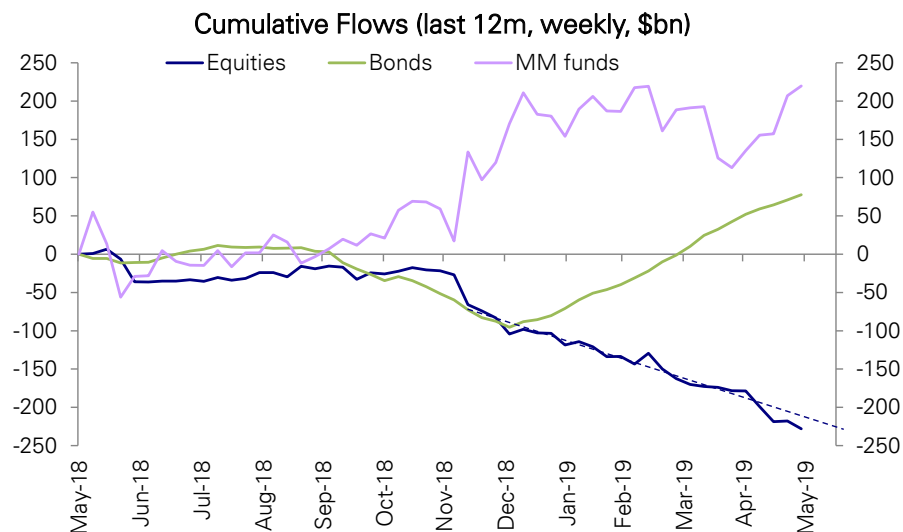
- **Across bond categories**, generic bond funds (\$5.3b) and corporate high grade (\$0.8b) got inflows, while corporate high yield (-\$3.0) and EM bonds (-\$0.4b) saw outflows. Government bonds (\$3.1b) got their biggest inflows in 20 weeks. Mortgage-backed bonds (\$1.1b) and munis (\$1.0b) were the other beneficiaries of fixed income inflows, whereas bank loans (-\$0.5b) and TIPS funds (-\$0.5b) saw redemptions.
- **Across regions**, US (\$3.1) and Europe (\$2.3b) got the most inflows, while EM (-\$0.4b) witnessed their third consecutive week of outflows.
- **Across maturities**, long term (\$1.0b), intermediate term (\$5.5b) and short term (\$1.6b) funds, all received inflows. This was the biggest weekly inflow to intermediate term funds since Feb 2018.
- **Money-market** funds received solid inflows (\$12.9b) for the 5th week in succession, taking the total inflows over the period to \$107b. US (\$13.7b) and Japan (\$0.5b) were the beneficiaries this week, while Europe witnessed -\$2.2b in outflows.

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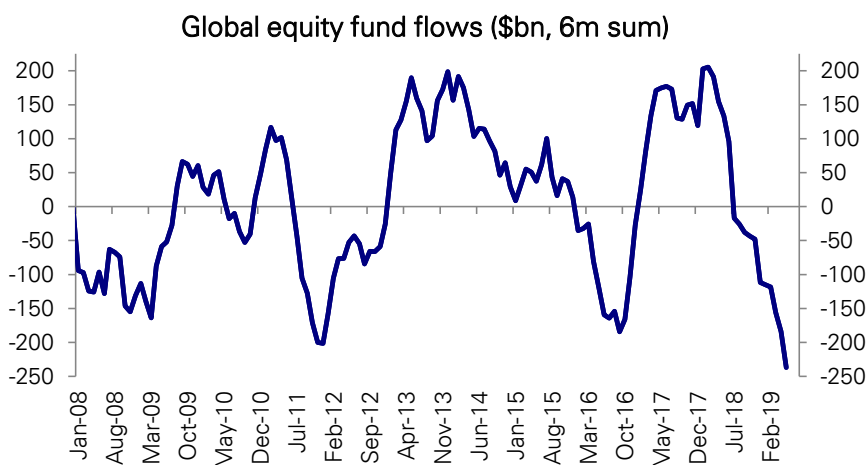


Figure 1: Months long defensive rotation in flows gathering steam



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver

Figure 2: Equity outflows over the last 6 months now the largest on record in dollar terms...



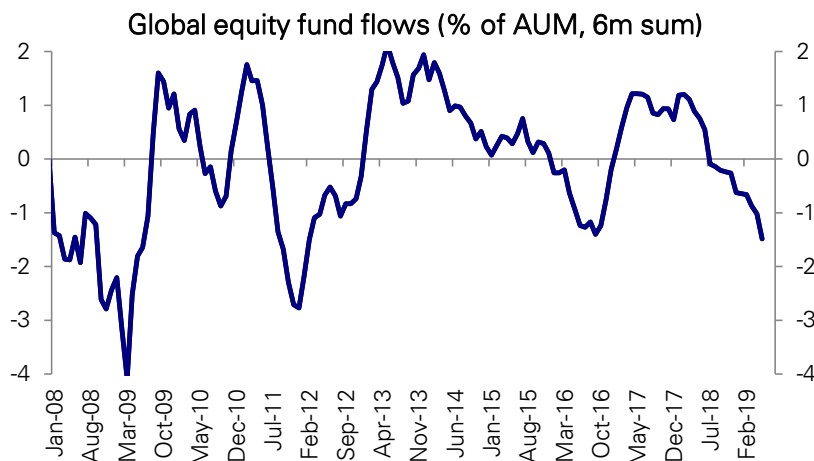
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver

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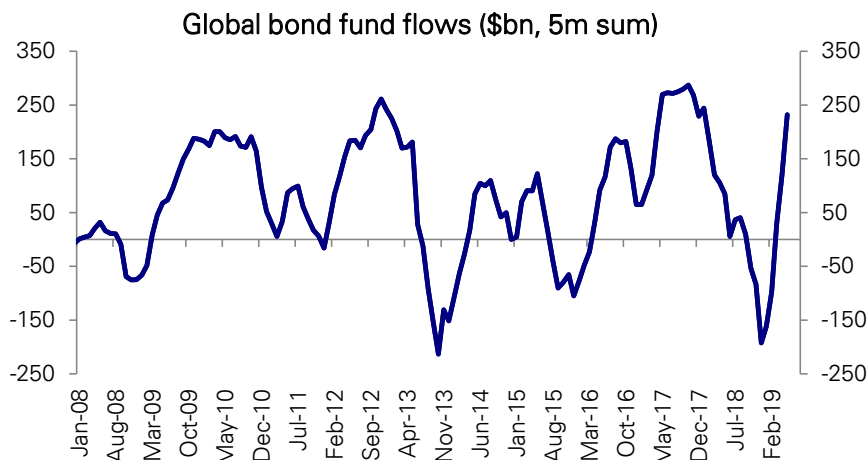


Figure 3: ... and amongst the largest as a percentage of AUM



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver

Figure 4: Bond funds on the other hand have seen huge inflows ytd, amongst the largest over comparable periods both in dollar terms...



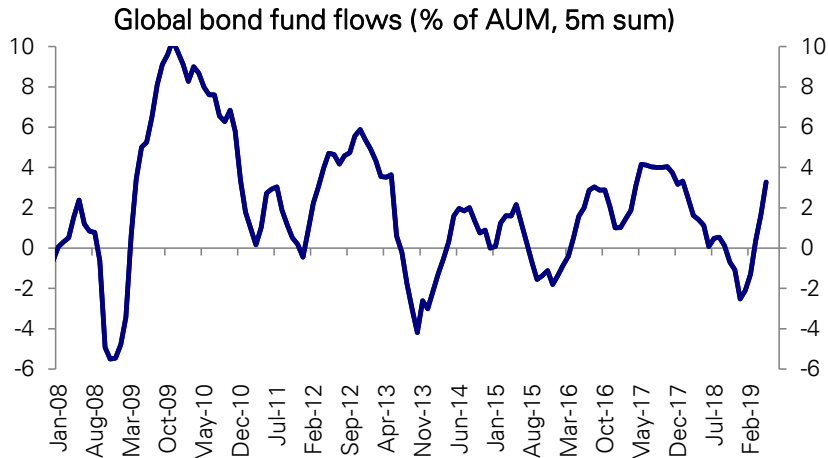
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver

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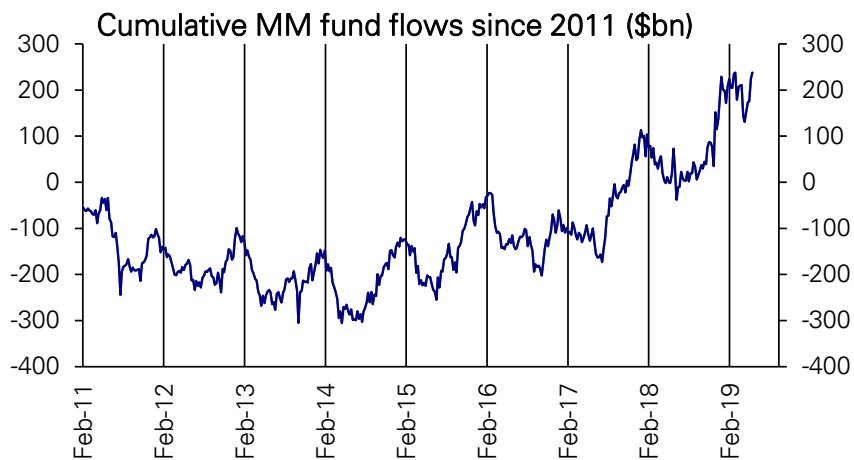


Figure 5: ...as well as a percentage of AUM



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver

Figure 6: Money-market funds are getting large inflows in a period which usually sees seasonal weakness



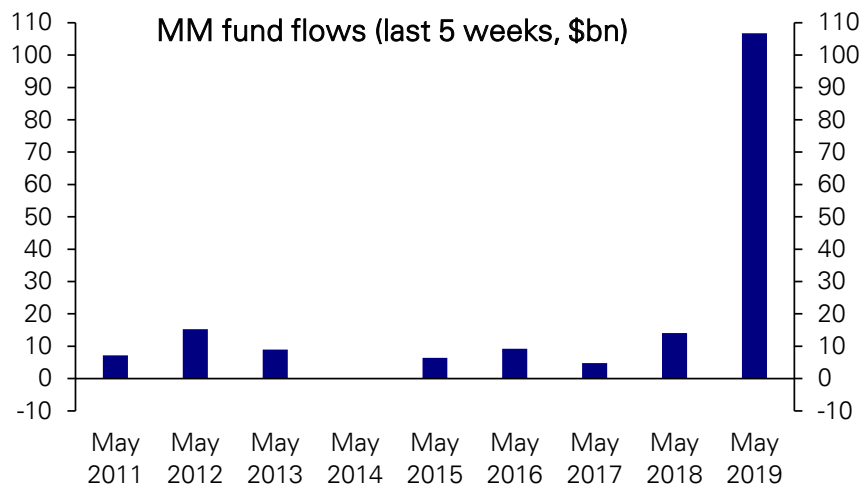
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver

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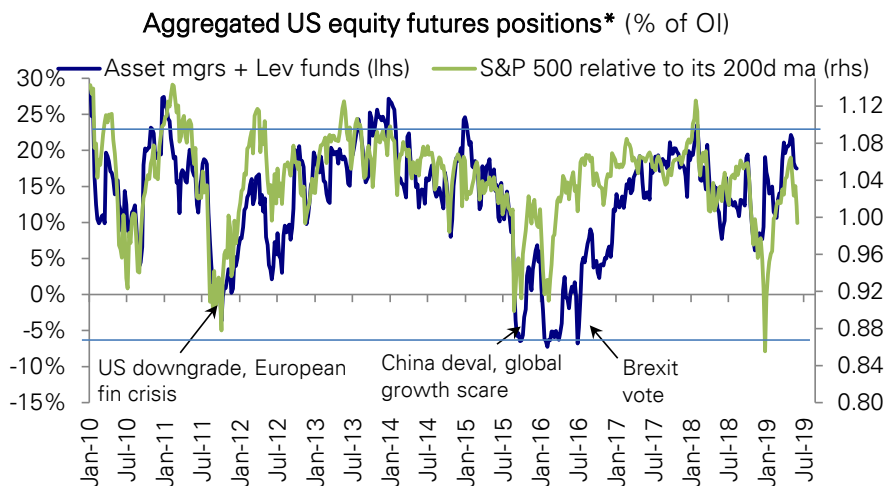


**Figure 7: Money-market funds have seen over \$100bn flow in over the last 5 weeks, dwarfing those in corresponding periods in previous years**



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver

**Figure 8: Equity futures positioning is declining slowly**



Net long futures positions in S&P 500, NASDAQ 100, DJIA, S&P 400 and R2K

Positioning data as of May 28, 2019

Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver

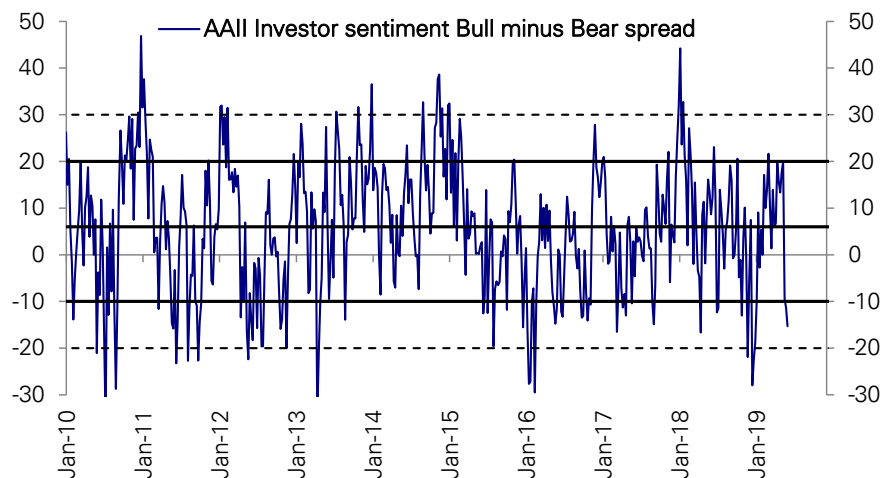


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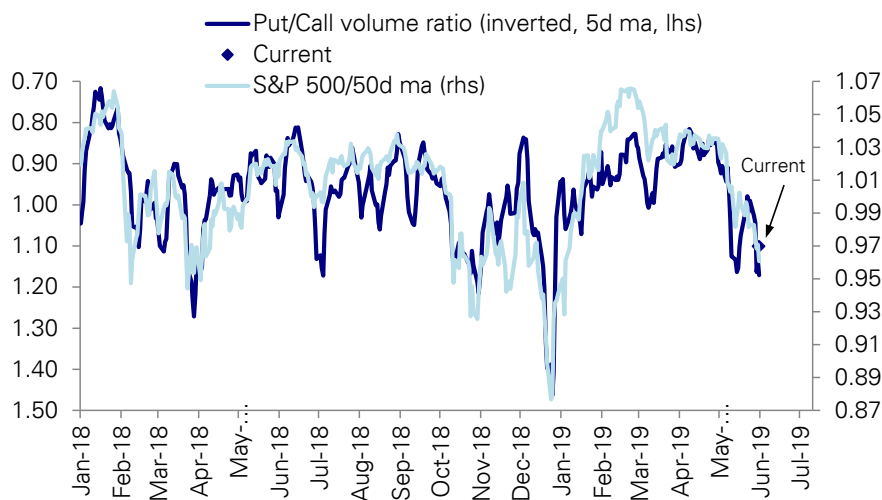


Figure 9: Retail sentiment is now below its normal range and approaching extremes



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg

Figure 10: Put/call volume ratios have been rising (inverted in chart below)



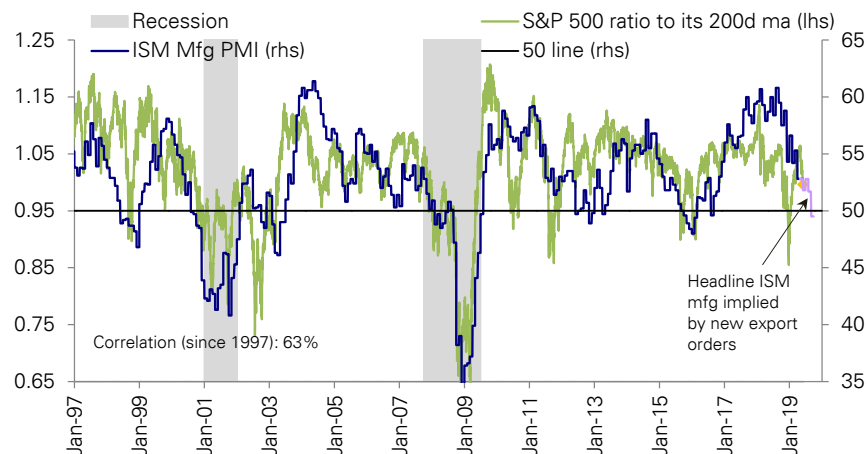
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Haver

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## Investor Positioning and Flows

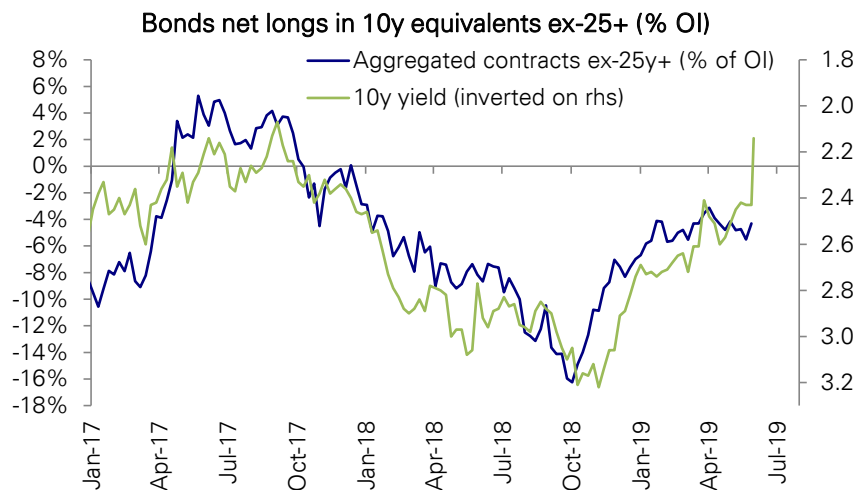


Figure 11: Equities have now fallen below levels pointed to by the ISM which itself is poised to decline further as the trade war takes a toll on exports



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Haver

Figure 12: Bond futures positions have likely turned neutral or even long



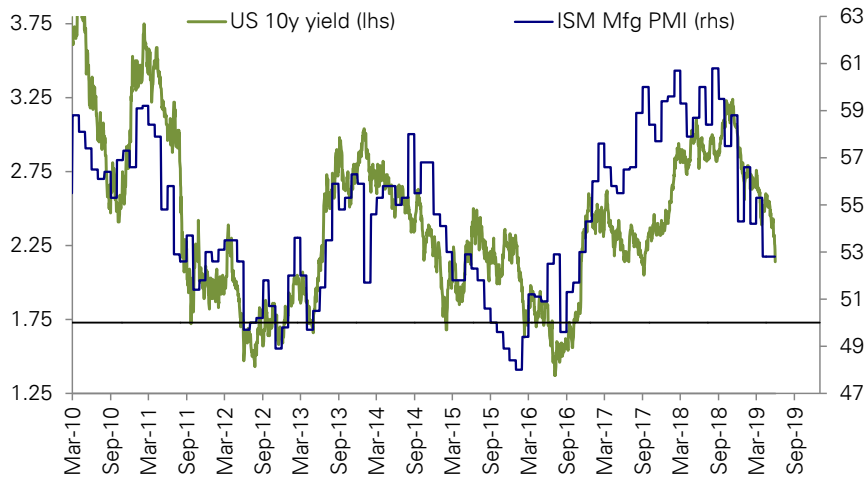
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver

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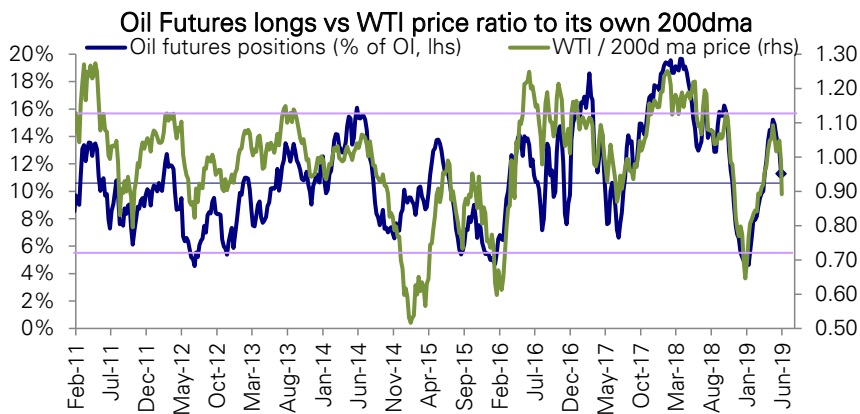


Figure 13: The 10y yield has fallen to levels implied by the ISM



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Haver

Figure 14: Oil positioning has now fallen to the middle of its historical range and price action suggests perhaps even lower



Note: Net positions of combined WTI and Brent crude oil positions; Positioning data as of May 28 2019

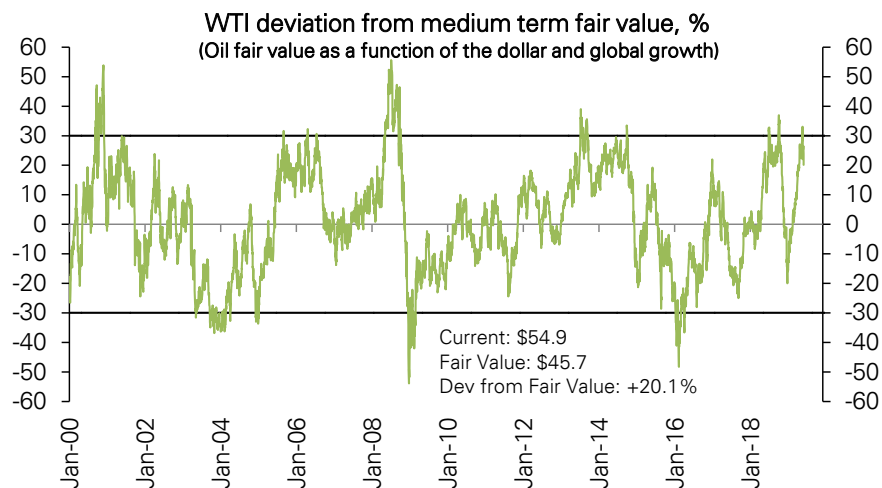
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver

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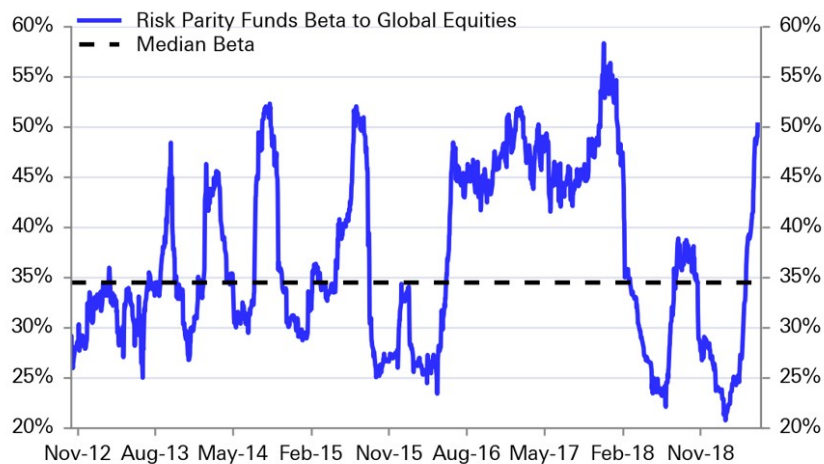
Figure 15: Oil prices remain overvalued relative to our estimate of medium term fair value



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Haver

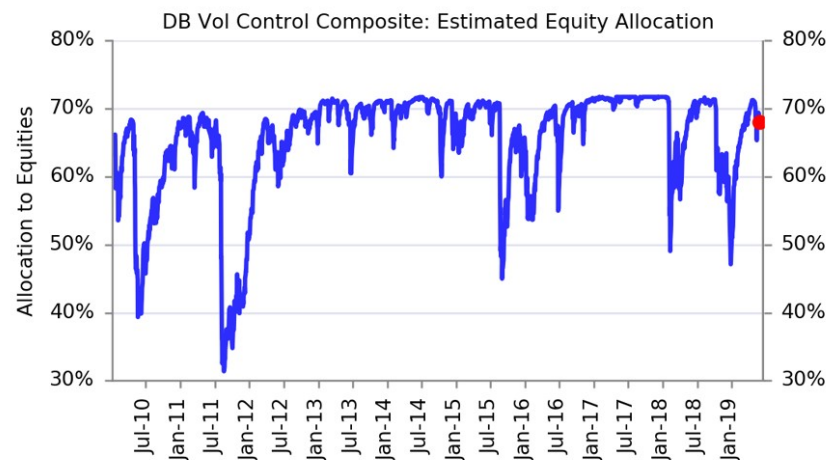
## vFLARE: Volatility-Sensitive Systematic Strategies

Figure 16: Risk Parity equity exposure has steadily climbed to the highest in more than a year



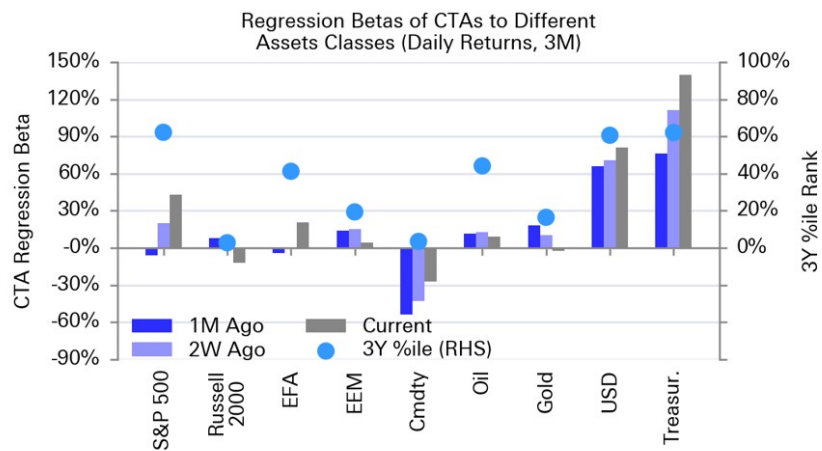
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 22-May-19

Figure 17: Vol Control equity exposure dipped a bit from their maximum allocations



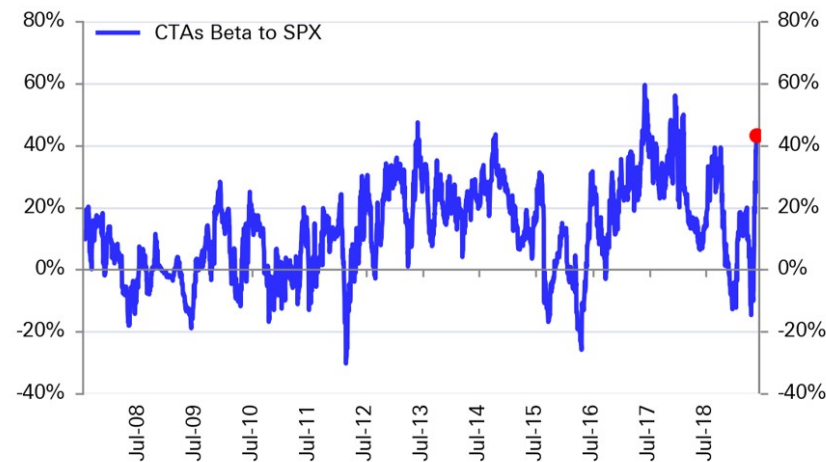
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 29-May-19

Figure 18: CTAs are most crowded in long USD and Treasuries



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 22-May-19

Figure 19: CTAs are long S&P 500 but not as crowded as in 2018

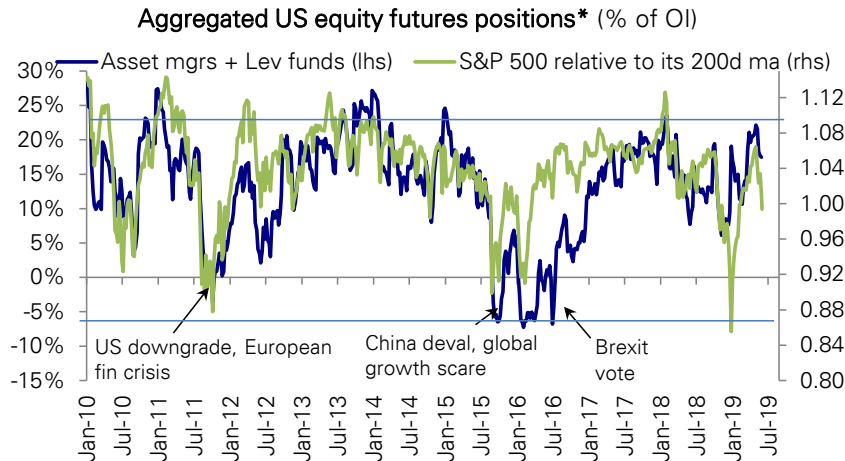


Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 22-May-19



## S&P 500 futures liquidity is still very low

Figure 20: Equity futures positioning and the S&P 500

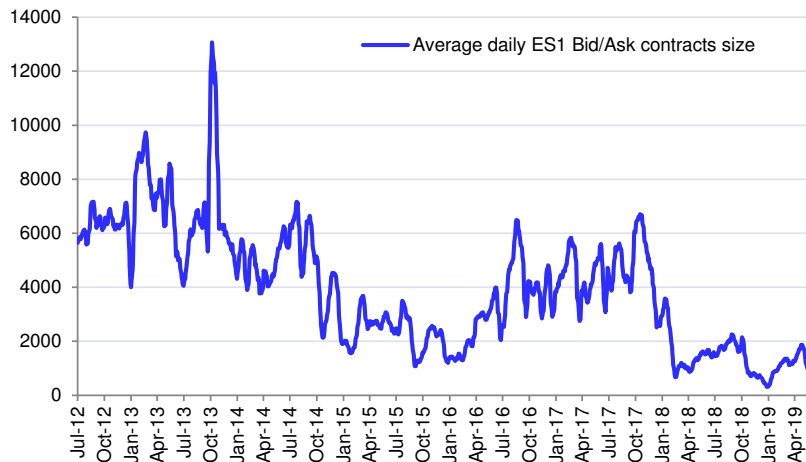


Net long futures positions in S&P 500, NASDAQ 100, DJIA, S&P 400 and R2K

Positioning data as of May 28, 2019

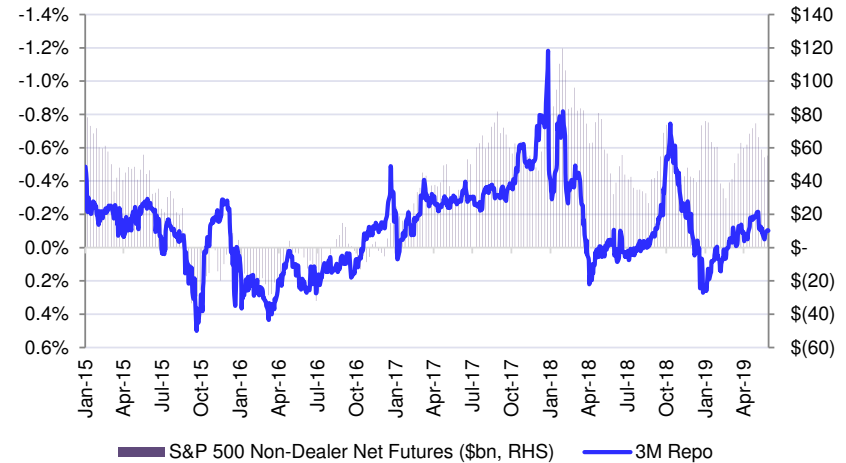
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 22: On-screen ES1 futures liquidity is very low



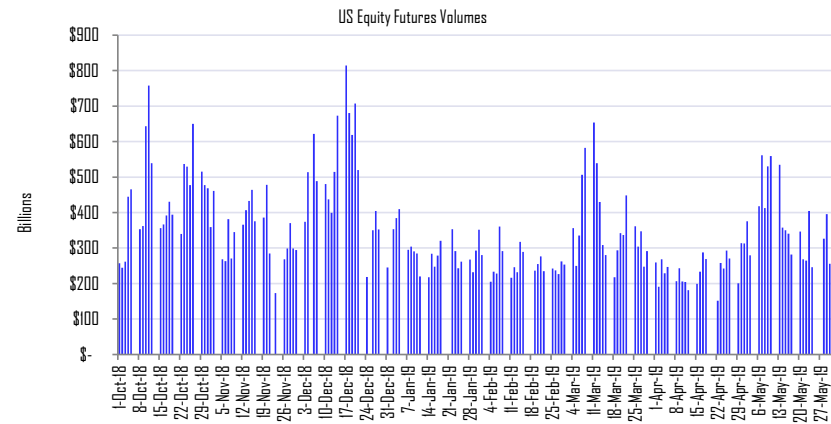
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy. Data as of 30-May-19.

Figure 21: Implied financing spreads are lower than their YTD highs



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC. Data as of 28-May-19.

Figure 23: US equity futures volumes were lower during the holiday week

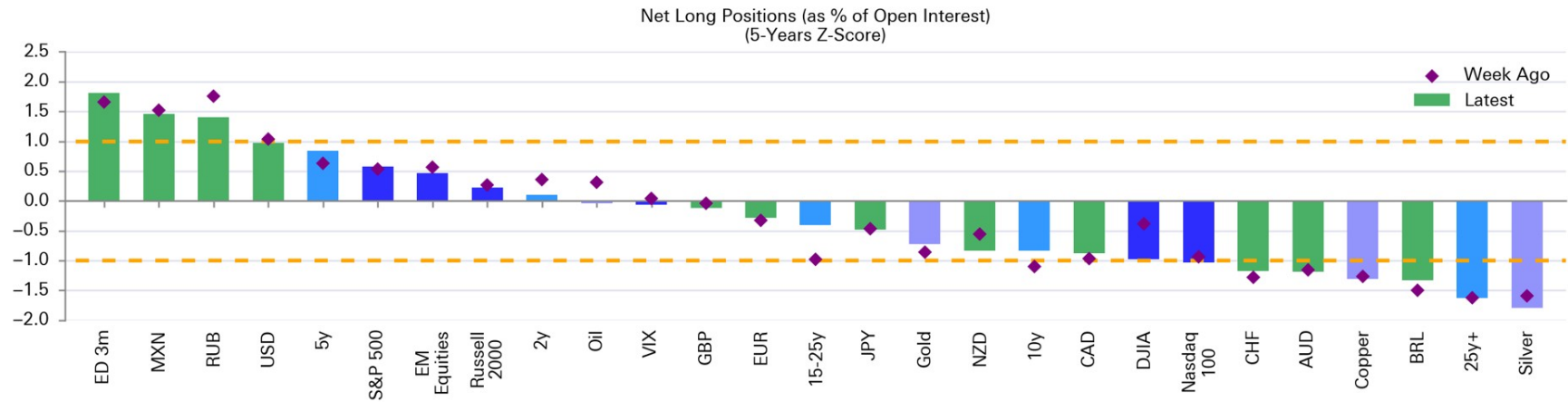


Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP, Data as of 30-May-19.



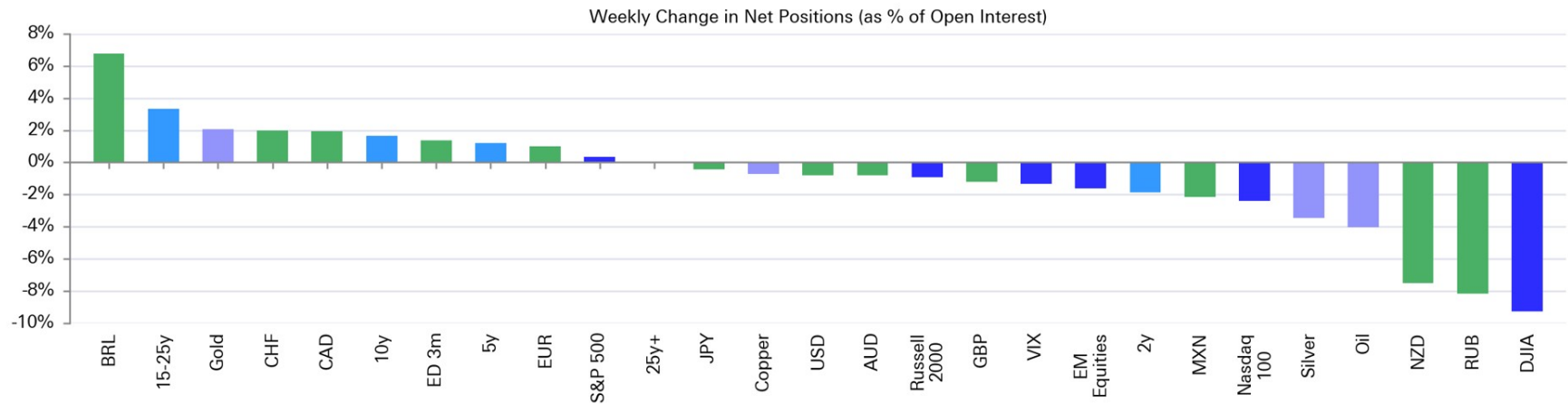
## Cross-Asset Futures Positioning and Flows

Figure 24: Investor positioning in cross asset futures as of May 28st



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 28-May-19.

Figure 25: Week-over-week changes in futures positioning

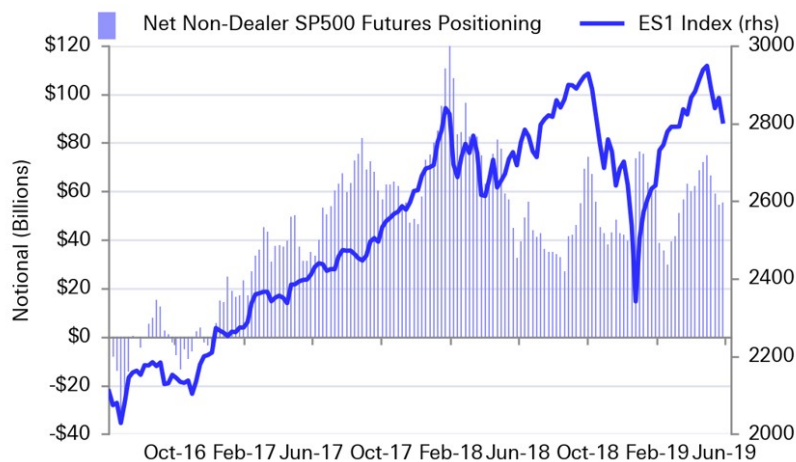


Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 28-May-19



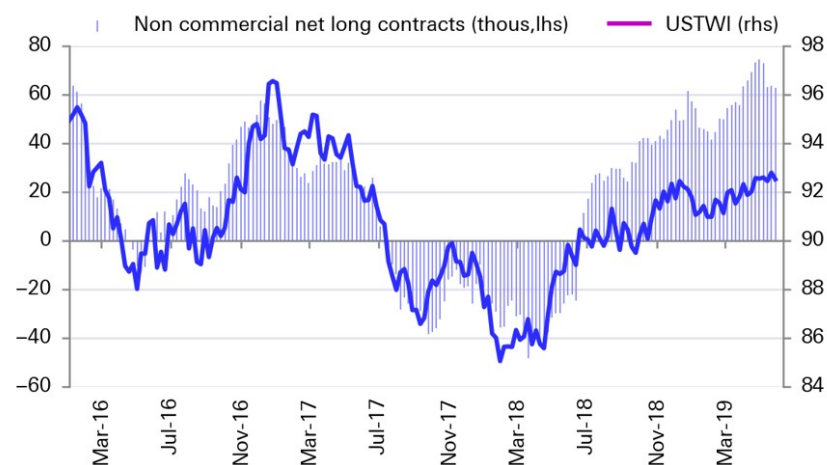
## Futures Positioning: US Equities, USD, WTI Oil, & 10Y Treasuries

Figure 26: S&P 500 futures positioning



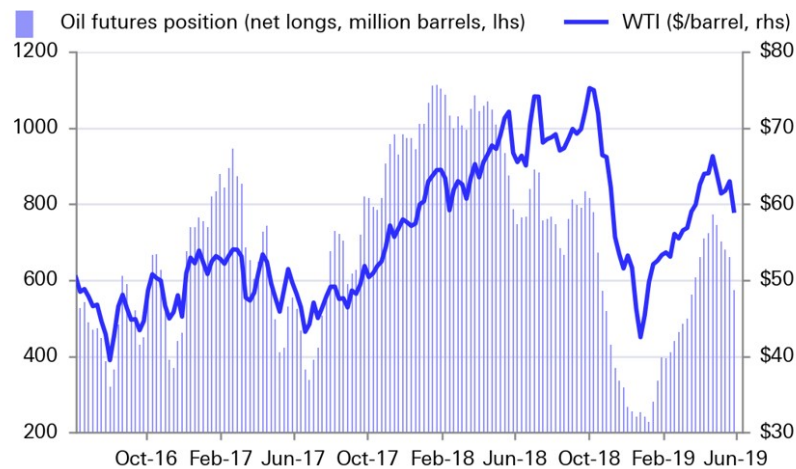
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 28-May-19

Figure 27: Dollar futures positioning



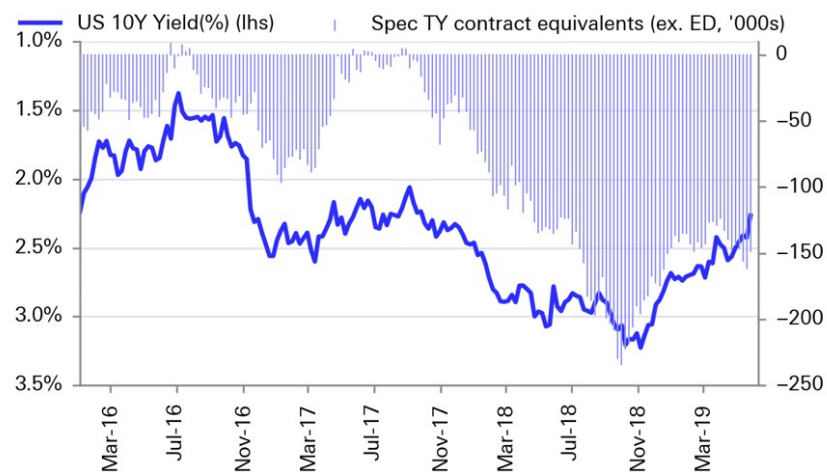
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 28-May-19

Figure 28: Oil futures positioning



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 28-May-19

Figure 29: Treasury futures positioning



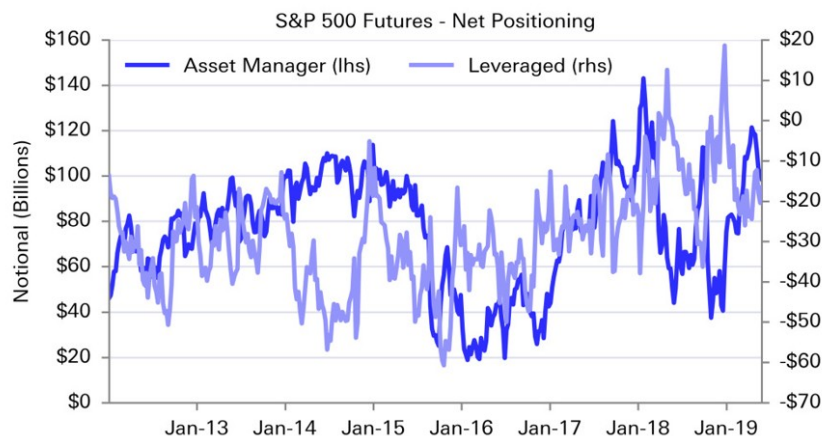
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 28-May-19





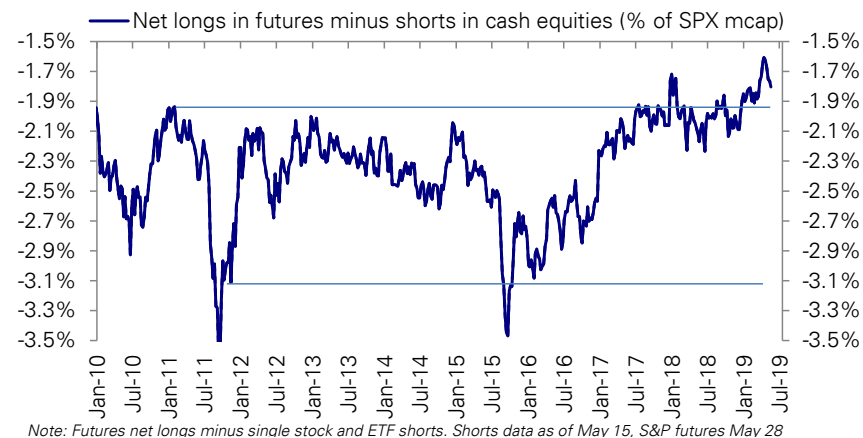
## Futures Positioning: US Equities

Figure 30: Leveraged Funds and Asset Managers futures positioning



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 28-May-19.

Figure 31: Aggregate futures positions and shorts in single stocks and ETFs



Note: Futures net longs minus single stock and ETF shorts. Shorts data as of May 15, S&P futures May 28

Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP.

Figure 32: US equity futures positioning - 1Y Percentile Ranks

|          | SPX | RTY | NDX | DJIA | MSCI EM | MSCI EAFE |
|----------|-----|-----|-----|------|---------|-----------|
| ND-LONG  | 49% | 8%  | 58% | 2%   | 57%     | 81%       |
| ND-SHORT | 51% | 4%  | 66% | 53%  | 9%      | 92%       |
| ND-NET   | 62% | 45% | 55% | 6%   | 62%     | 51%       |
| AM-LONG  | 49% | 26% | 87% | 15%  | 58%     | 85%       |
| AM-SHORT | 38% | 62% | 6%  | 40%  | 28%     | 100%      |
| AM-NET   | 77% | 47% | 94% | 38%  | 62%     | 55%       |
| LM-LONG  | 42% | 9%  | 42% | 9%   | 17%     | 17%       |
| LM-SHORT | 40% | 13% | 89% | 68%  | 34%     | 9%        |
| LM-NET   | 49% | 51% | 4%  | 9%   | 55%     | 53%       |
| OT-LONG  | 62% | 28% | 21% | 70%  | 66%     | 98%       |
| OT-SHORT | 98% | 96% | 89% | 75%  | 2%      | 21%       |
| OT-NET   | 17% | 21% | 13% | 38%  | 98%     | 98%       |

Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 28-May-19.

Figure 33: US equity futures WoW Change - 1Y Z-score

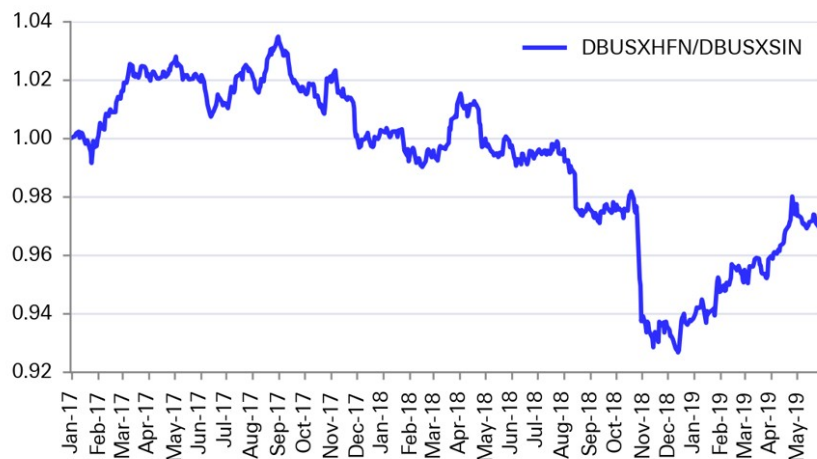
|          | SPX   | RTY   | NDX   | DJIA  | MSCI EM | MSCI EAFE |
|----------|-------|-------|-------|-------|---------|-----------|
| ND-LONG  | -0.1  | -0.32 | 0.14  | -1.75 | -0.88   | -0.35     |
| ND-SHORT | -0.19 | -0.29 | 0.88  | -0.5  | -0.44   | -0.26     |
| ND-NET   | 0.08  | -0.12 | -0.36 | -1.26 | -0.74   | -0.24     |
| AM-LONG  | -0.41 | -0.72 | 0.4   | -2.92 | -1.23   | -0.42     |
| AM-SHORT | 0.18  | -0.36 | 1.3   | 0.15  | 0.38    | 0.2       |
| AM-NET   | -0.43 | -0.45 | -0.4  | -2.58 | -1.3    | -0.47     |
| LM-LONG  | 0.59  | 0.72  | -0.22 | 0.12  | 0.99    | 0.18      |
| LM-SHORT | -0.32 | 0.02  | -0.03 | -0.95 | -1.28   | -0.47     |
| LM-NET   | 0.6   | 0.53  | -0.14 | 0.69  | 1.74    | 0.42      |
| OT-LONG  | 0.17  | -0.7  | -0.06 | -0.16 | 0.78    | 0.02      |
| OT-SHORT | -0.33 | 0.06  | -0.42 | 0.57  | -0.27   | 0.02      |
| OT-NET   | 0.31  | -0.45 | 0.26  | -0.62 | 0.79    | 0.01      |

Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 28-May-19.



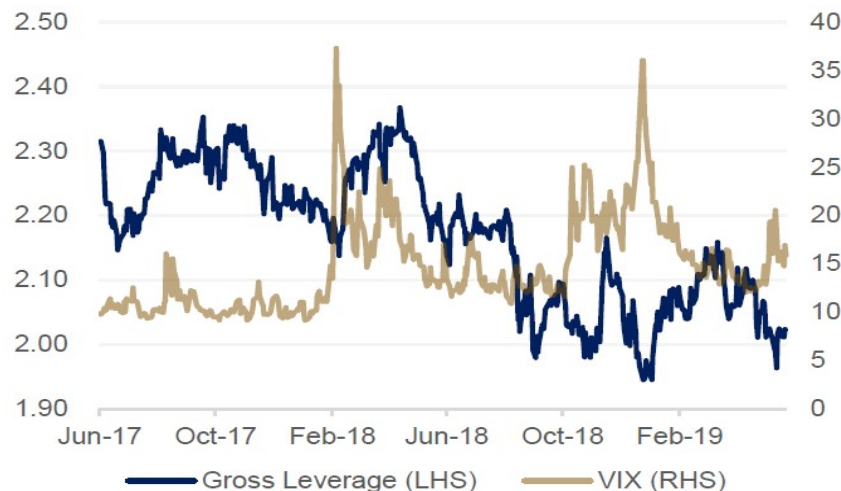
## Equity L/S Hedge Funds

Figure 34: Hedge Fund's top \$-longs underperformed their top \$-shorts this week



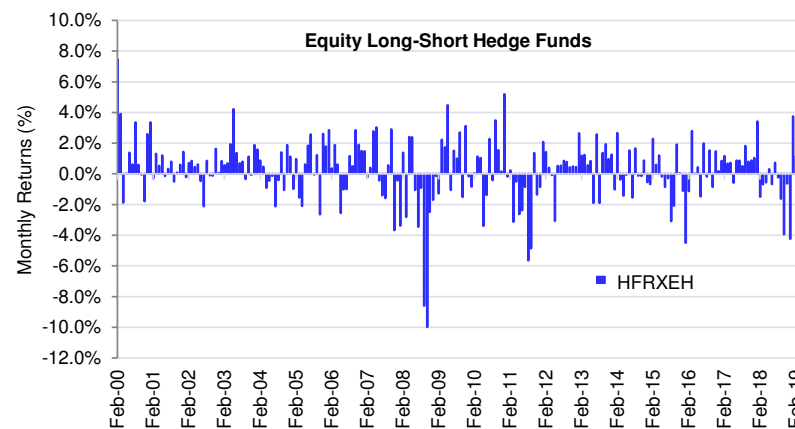
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP, Factset, Axima. Data as of 30-May-19.

Figure 36: L/S Equity Hedge Funds Gross Leverage was stable but near the lower end



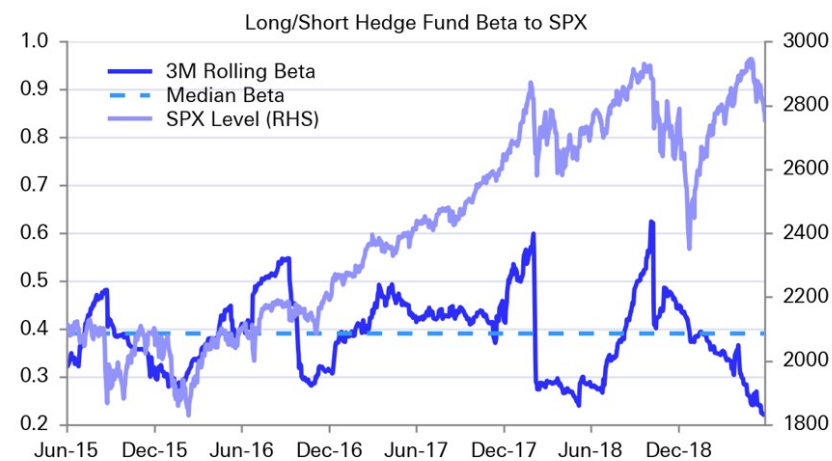
Source : Deutsche Bank Global Prime Finance, Reuters. Data as of 24-May-19.

Figure 35: Equity L/S Hedge Fund returns are down -2% in May



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP. Data as of 29-May-19.

Figure 37: Net Beta for Equity L/S is low

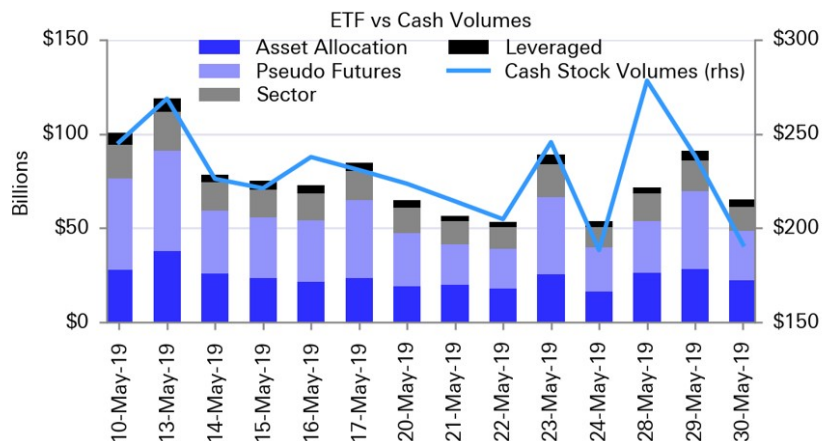


Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP. Data as of 29-May-19.



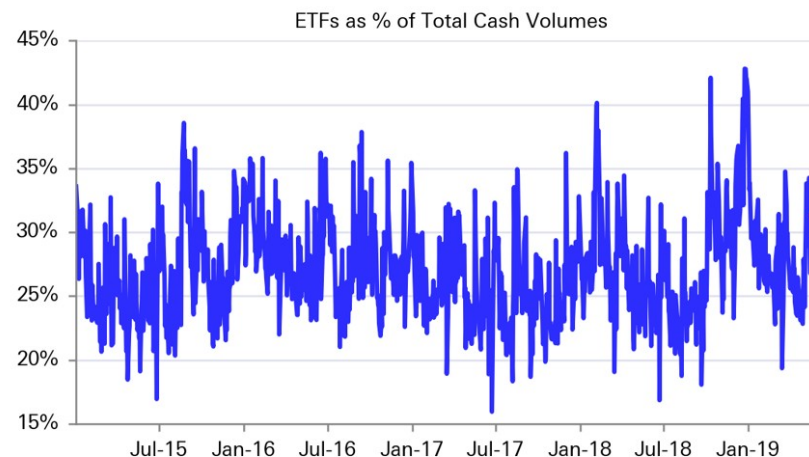
## ETFs: Volumes and Flows

Figure 38: Cash and ETF volumes decreased this week



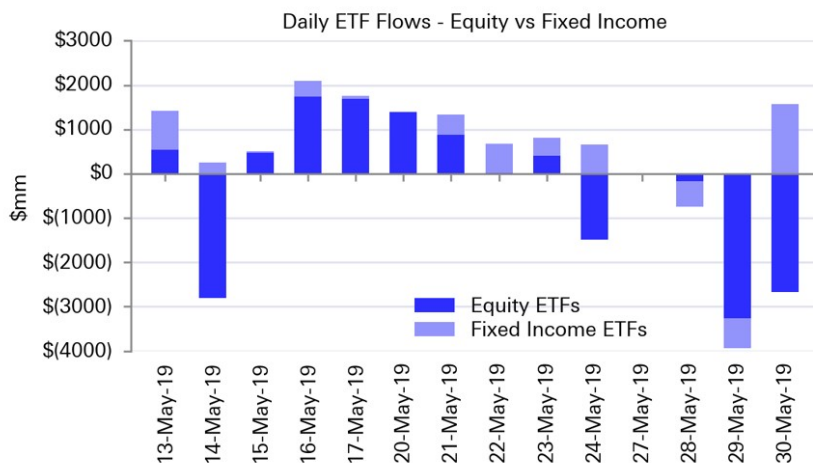
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Reuters, Bloomberg Finance LP, Data as of 30-May-19

Figure 39: ETF participation in cash trading remained range bound



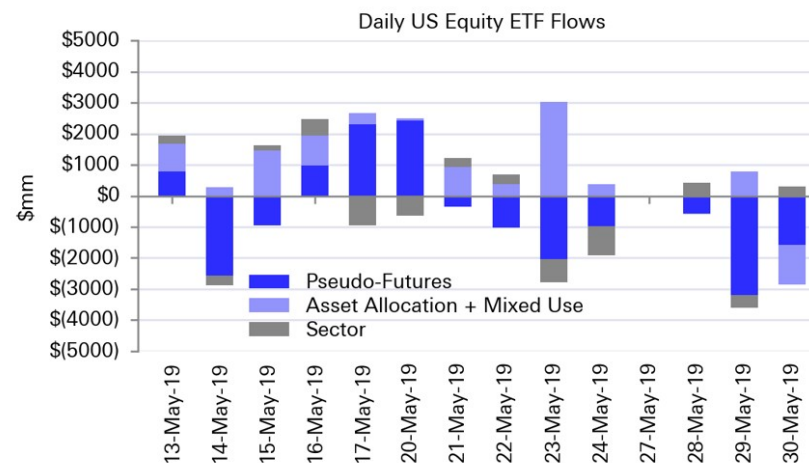
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Reuters, Bloomberg Finance LP, Data as of 30-May-19

Figure 40: Fixed Income ETFs had big inflows as rates fell and Equity ETFs registered outflows



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Reuters, Bloomberg Finance LP, Data as of 30-May-19

Figure 41: Pseudo-futures ETFs were mainly behind the outflows this week

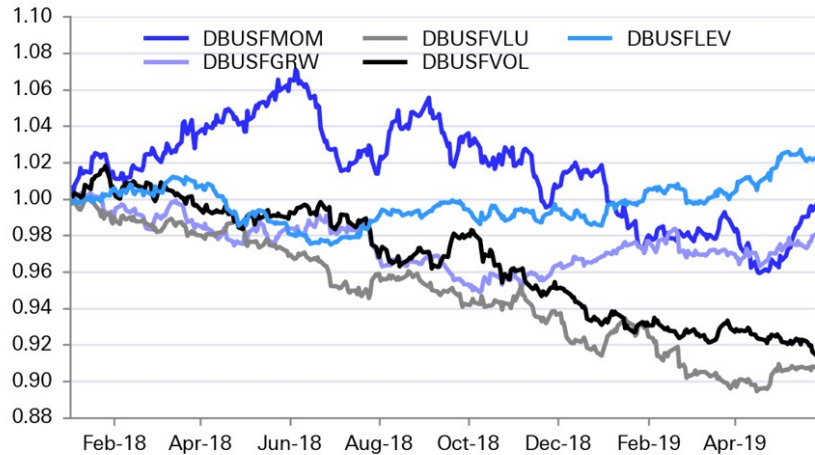


Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Reuters, Bloomberg Finance LP, Data as of 30-May-19



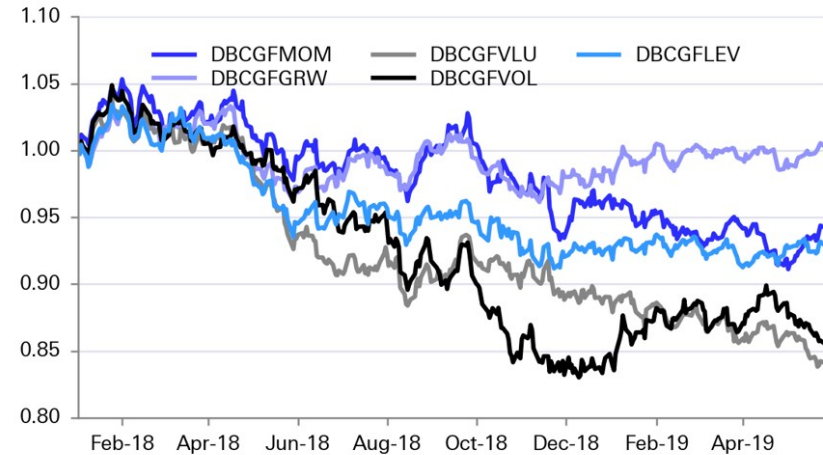
## Equity Premia: Momentum rallied; China-beta themes underperformed

Figure 42: US Fast Factors: Momentum kept up its rally this week



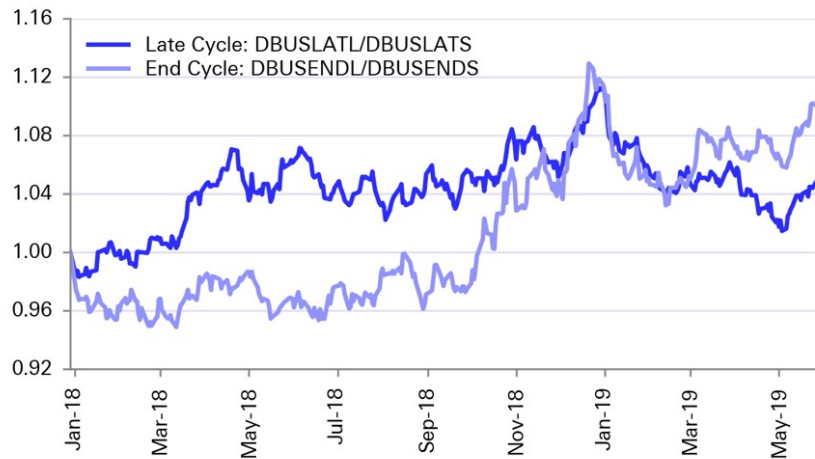
Source : Deutsche Bank Quantitative & Delta-1 Strategy, Axioma, Factset, Bloomberg Finance LP, Data as of 30-May-19

Figure 43: Europe Fast Factors: Residual Vol and Value sold off



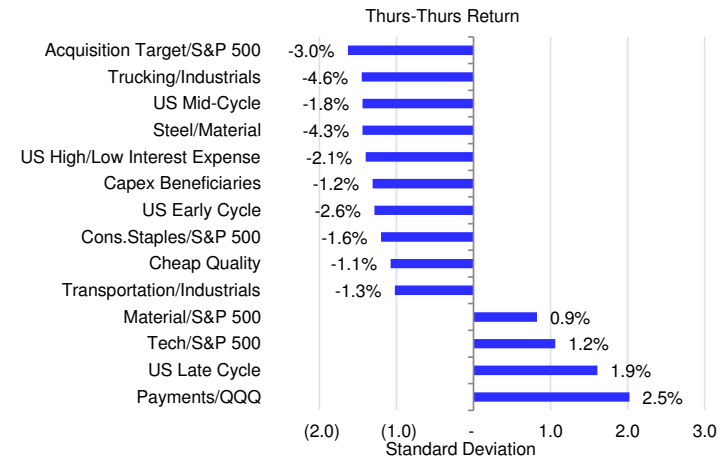
Source : Deutsche Bank Quantitative & Delta-1 Strategy, Axioma, Factset, Bloomberg Finance LP, Data as of 30-May-19

Figure 44: Late and End Macro Cycle baskets rallied



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Haver Analytics, Bloomberg Finance LP, Data as of 30-May-19.

Figure 45: US Late cycle baskets and Tech outperformance to S&P 500 were among the few positive performers this week



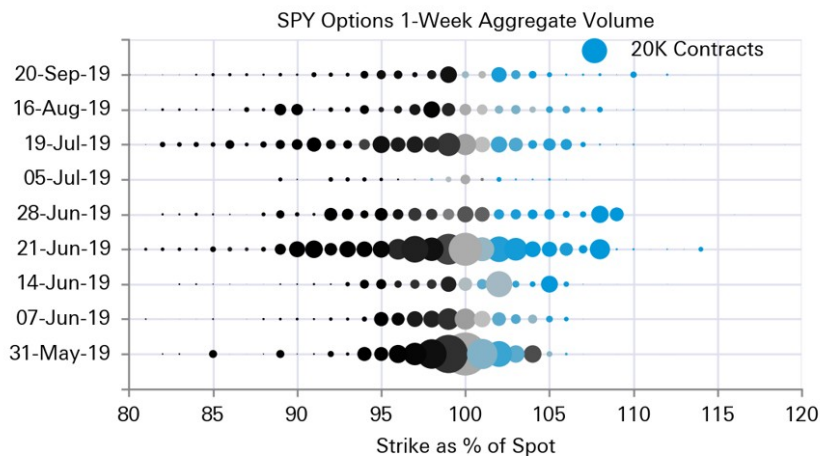
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Axioma, Factset, Bloomberg Finance LP, Data as of 30-May-19





## S&P 500 Options: Open Interest, Vol, Skew, Correlation

Figure 46: SPY put options remained active



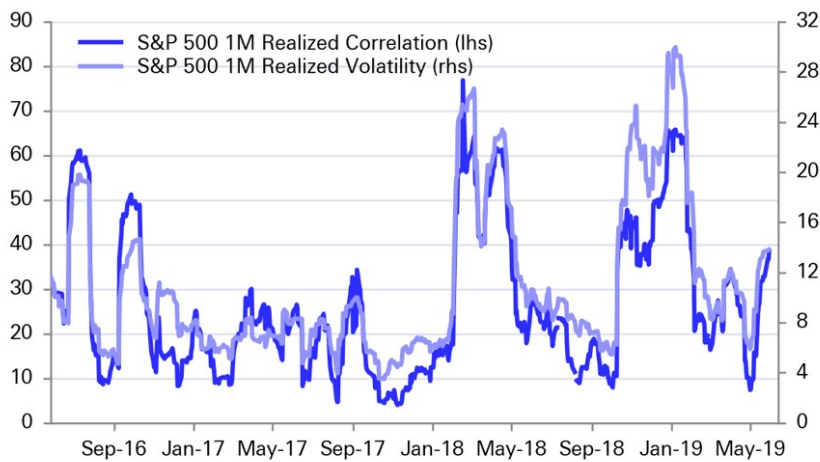
Source : Deutsche Bank Quant & Delta-1 Strategy, OptionMetrics, Bloomberg Finance LP. Data as of 30-May-19.

Figure 47: Put-call ratio for S&P 500 is near YTD high



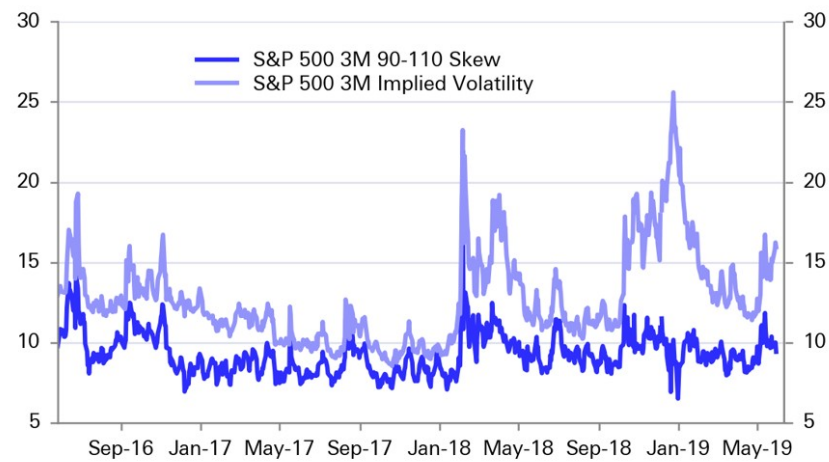
Source : Deutsche Bank Quant & Delta-1 Strategy, OptionMetrics, Bloomberg Finance LP. Data as of 30-May-19

Figure 48: 1M realized correlation and volatility increased but are still moderate



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP, Reuters. Data as of 30-May-19.

Figure 49: Implied volatility has picked up again, while skew remains relatively stable

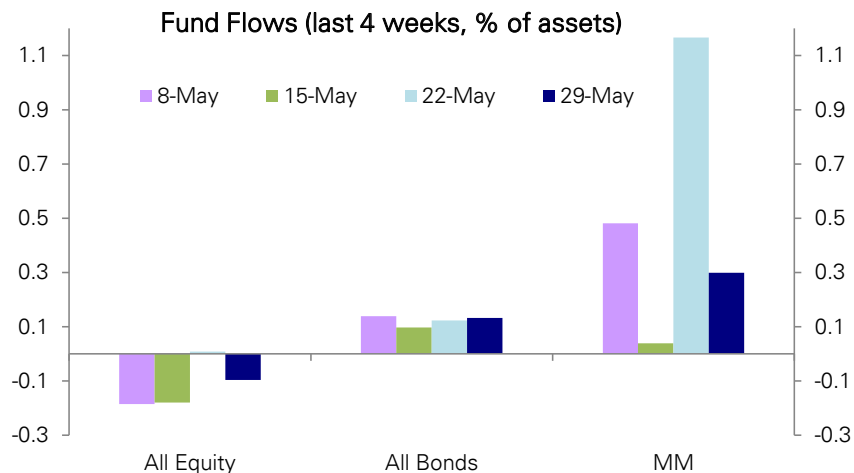


Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP, Reuters. Data as of 30-May-19.



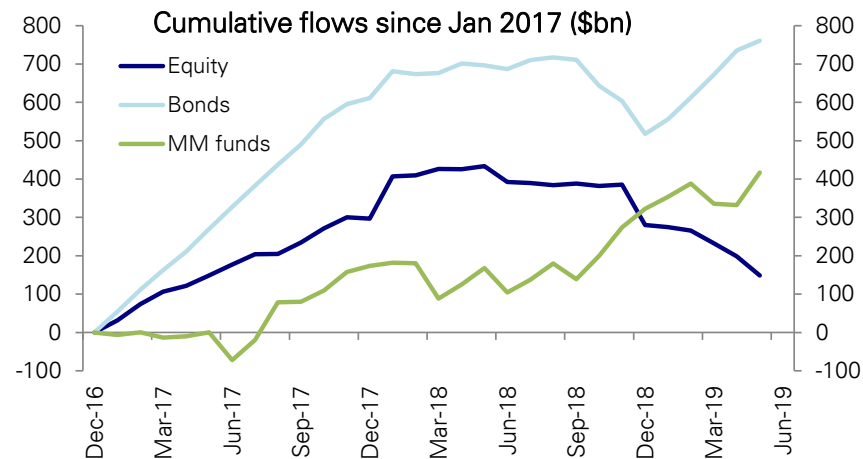
## Cross-asset flows

Figure 50: Flows across asset classes last 4 weeks



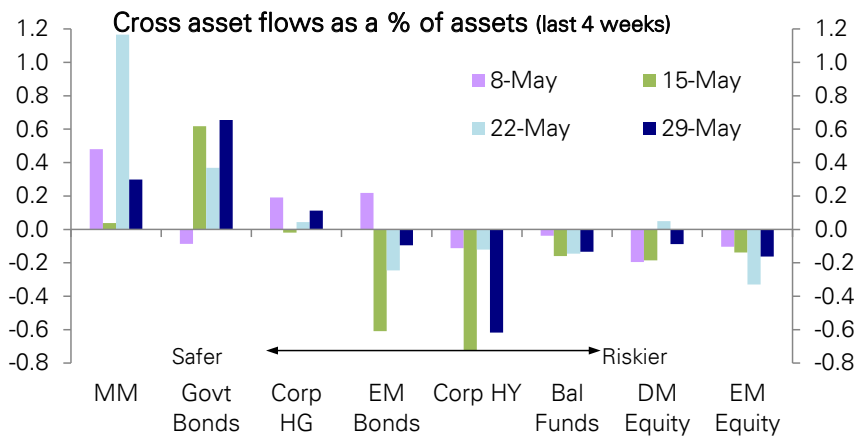
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

Figure 51: Flows across asset classes cumulative since 2017



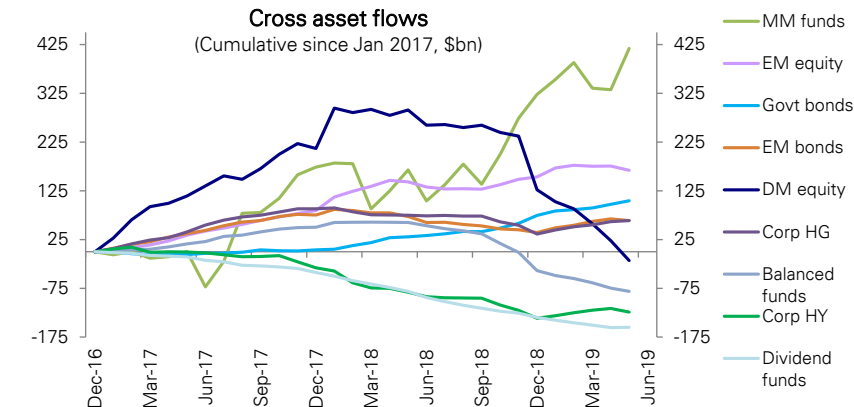
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

Figure 52: Cross asset flows last 4 weeks



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

Figure 53: Cross asset flows cumulative since 2017

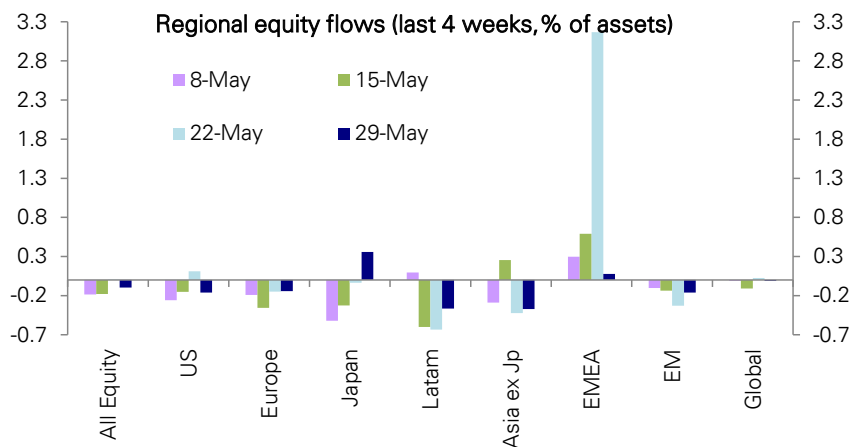


Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19



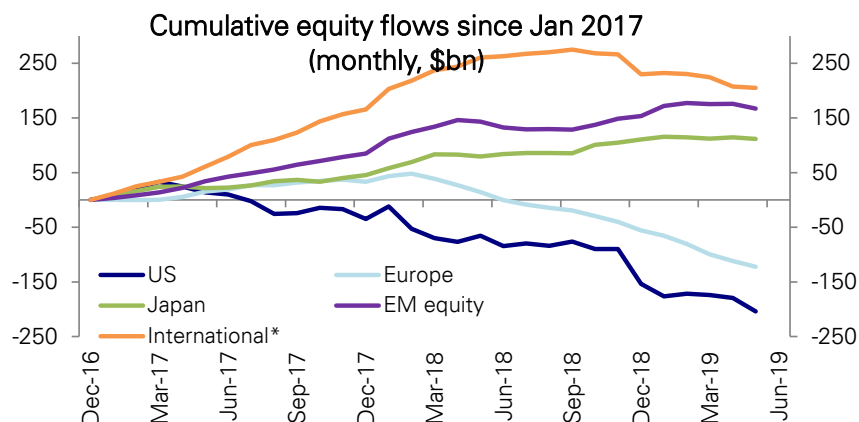
## Equity Flows

Figure 54: Regional equity fund flows last 4 weeks



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

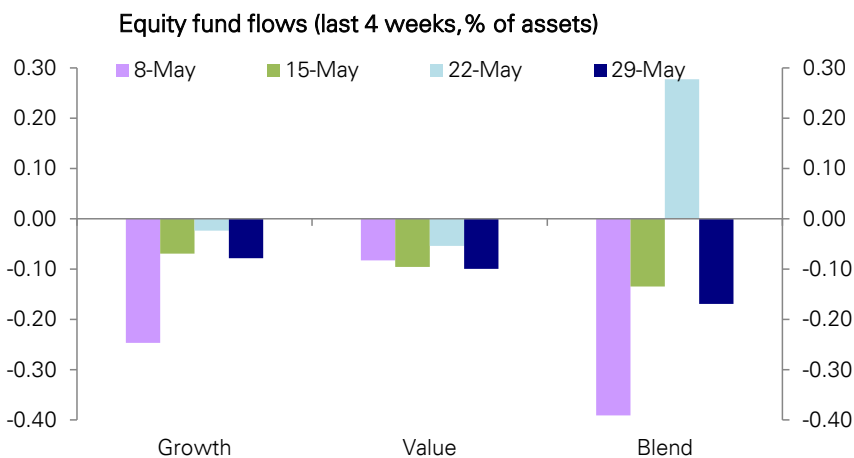
Figure 55: Equity flows across region



\*Funds with a global mandate, overwhelmingly tend to be focused on DM ex-US

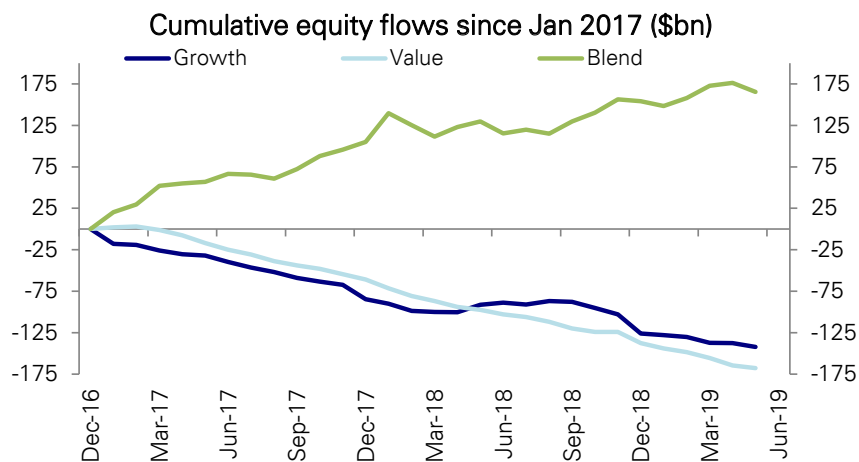
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

Figure 56: Equity flows by fund style last 4 weeks



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

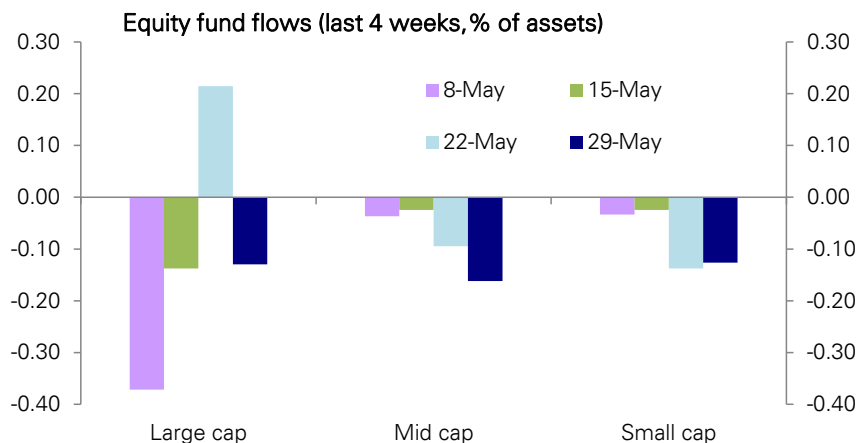
Figure 57: Equity flows by fund style



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

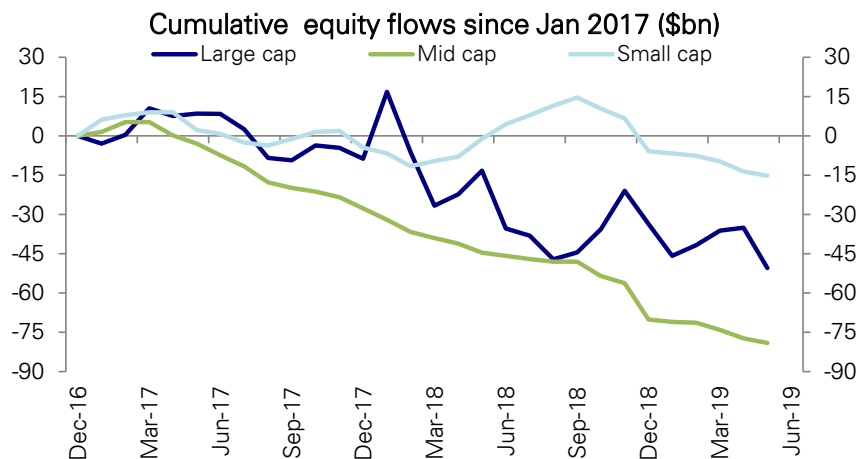


Figure 58: Equity fund flows by size last 4 weeks



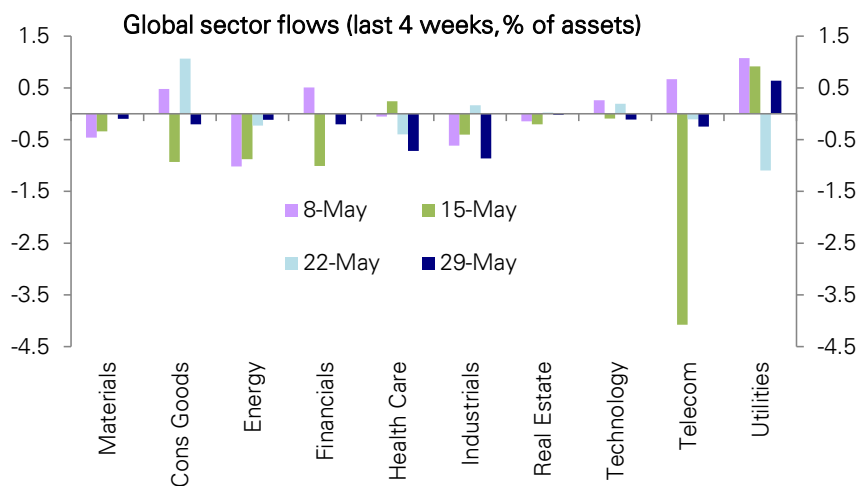
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

Figure 59: Equity fund flows by size



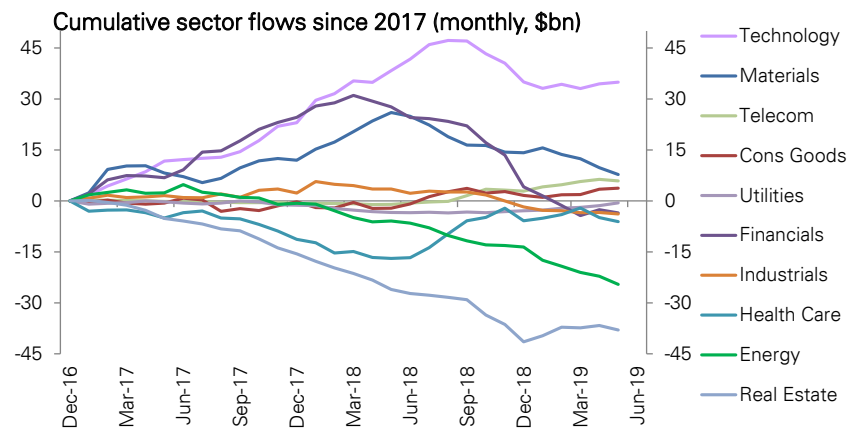
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

Figure 60: Sector fund flows last 4 weeks



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

Figure 61: Sector fund flows



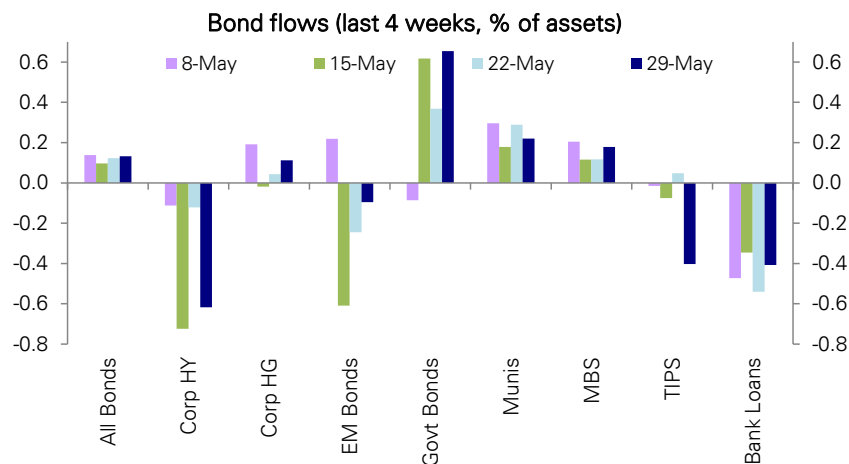
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19





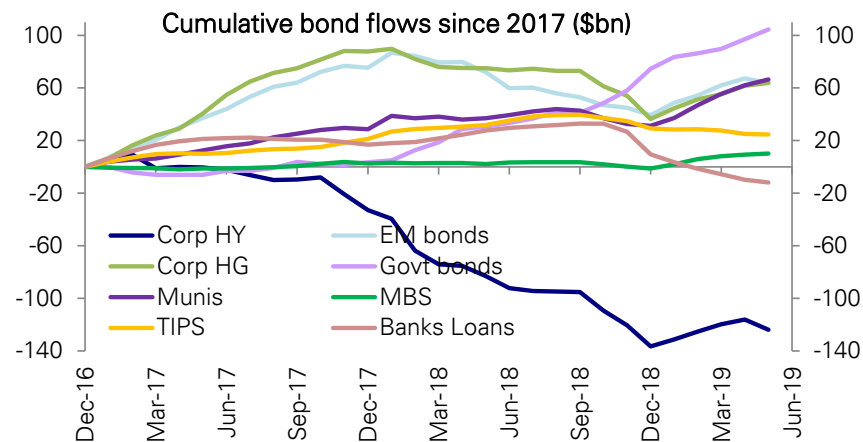
## Bond fund flows

Figure 62: Bond fund flows by category last 4 weeks



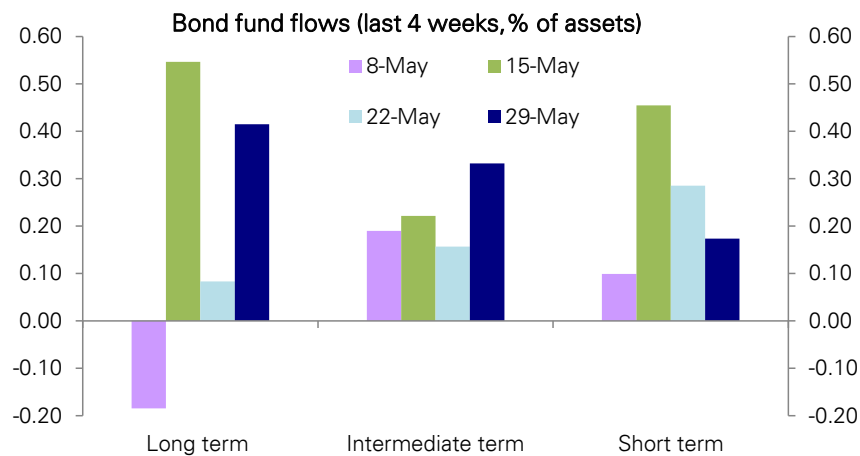
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

Figure 63: Bond flows by category



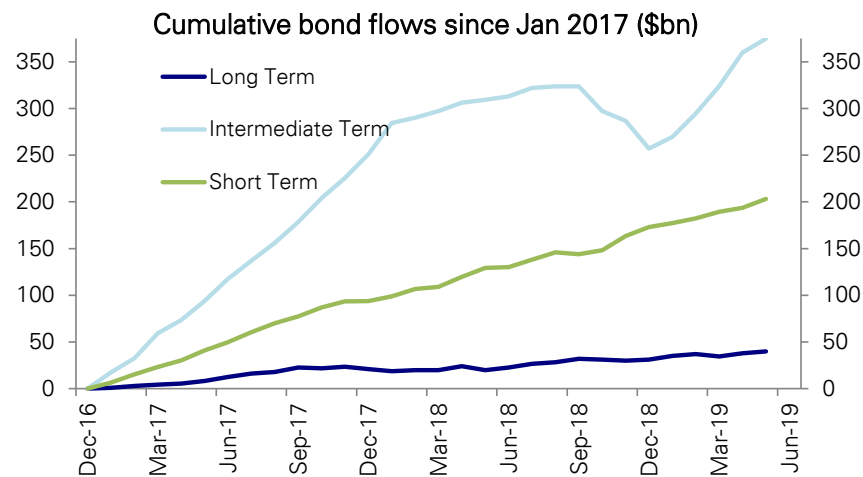
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

Figure 64: Bond fund flows by maturity last 4 weeks



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19

Figure 65: Bond fund flows by maturity

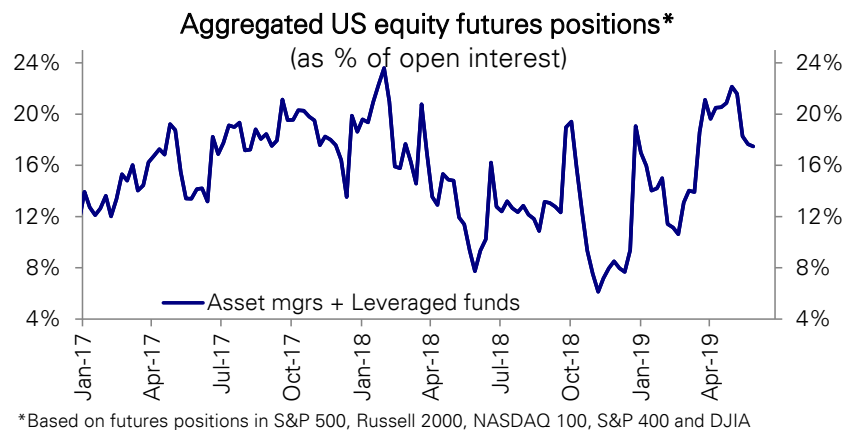


Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 29-May-19



## Equity futures positioning

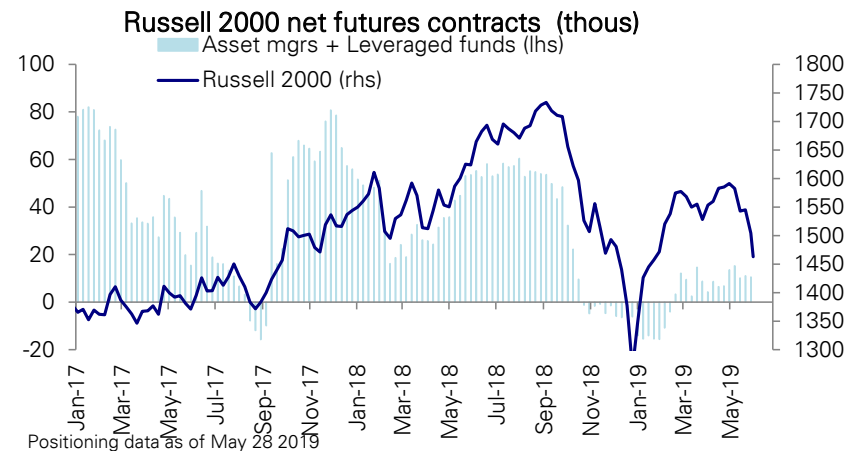
Figure 66: Aggregate US equity futures positioning



Positioning data as of May 28, 2019

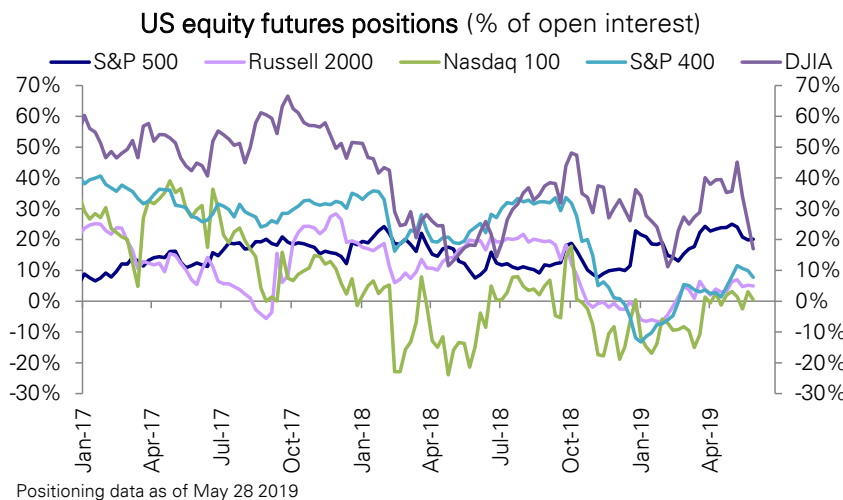
Source : DB Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 67: Russell 2000 futures positioning



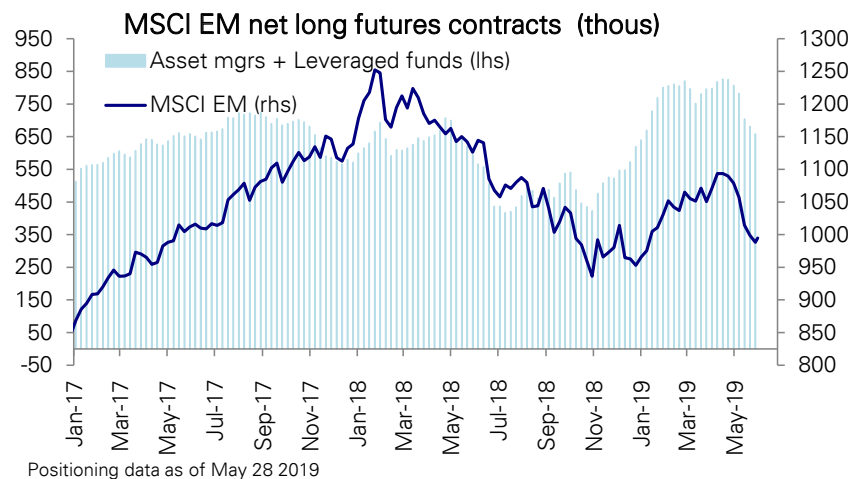
Source : DB Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 68: US equity futures positioning



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 69: EM equity futures positioning

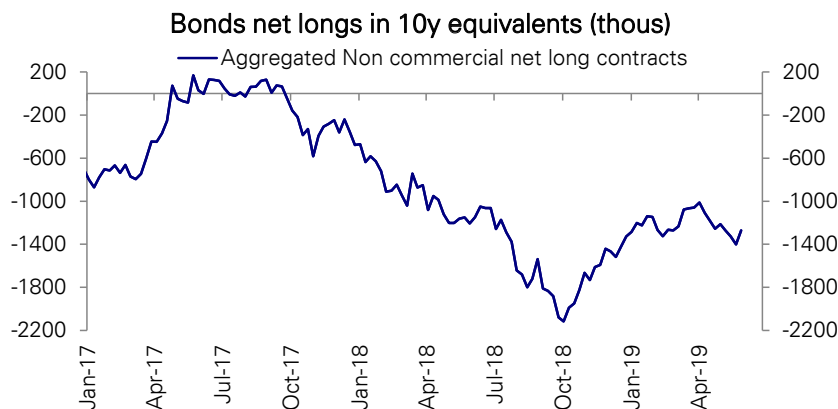


Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics



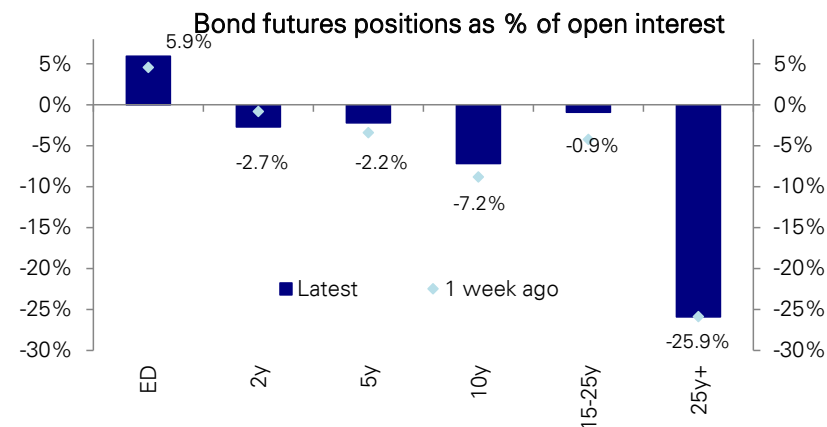
## Bond futures positioning

Figure 70: Aggregate bond futures positioning



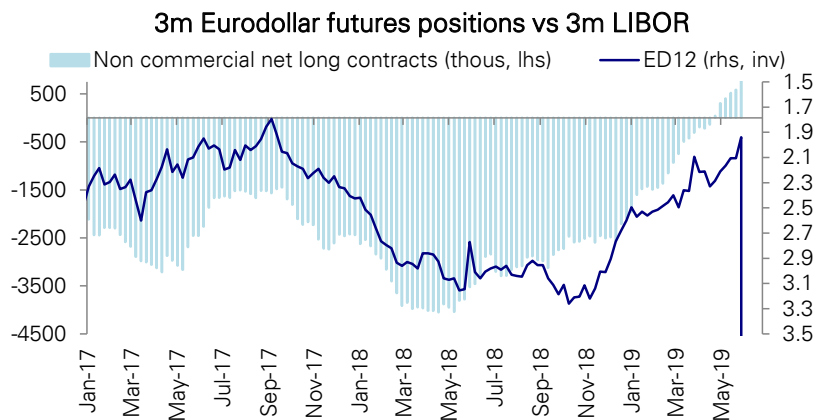
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 71: Bond futures positioning by maturity



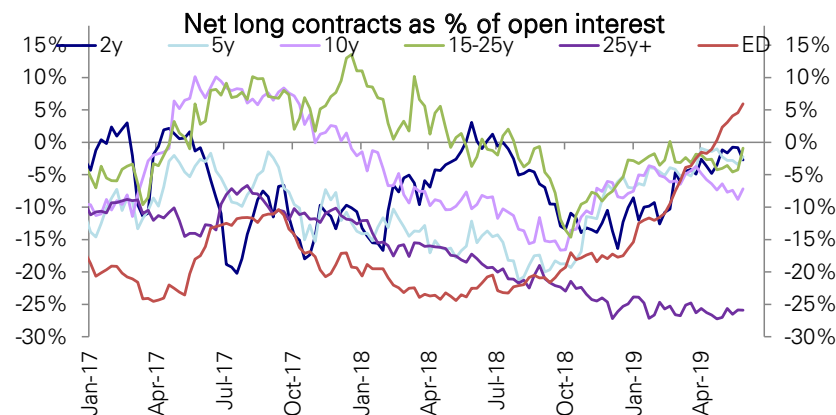
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 72: Eurodollar futures positioning



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 73: Bond futures positioning by maturity

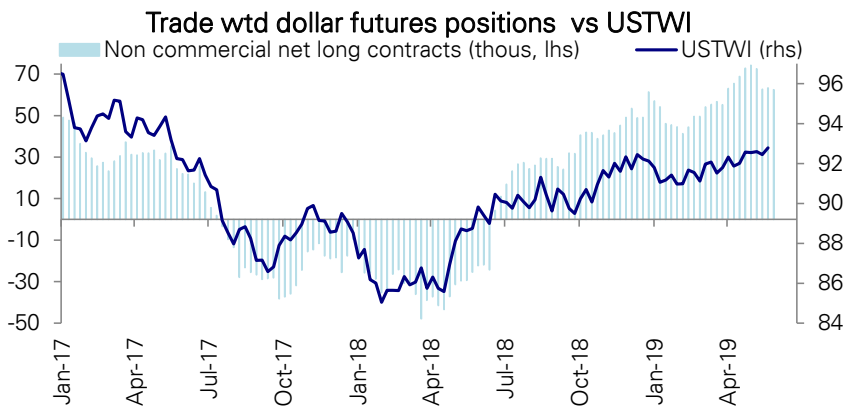


Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics



## FX futures positioning

Figure 74: US trade weighted dollar positioning

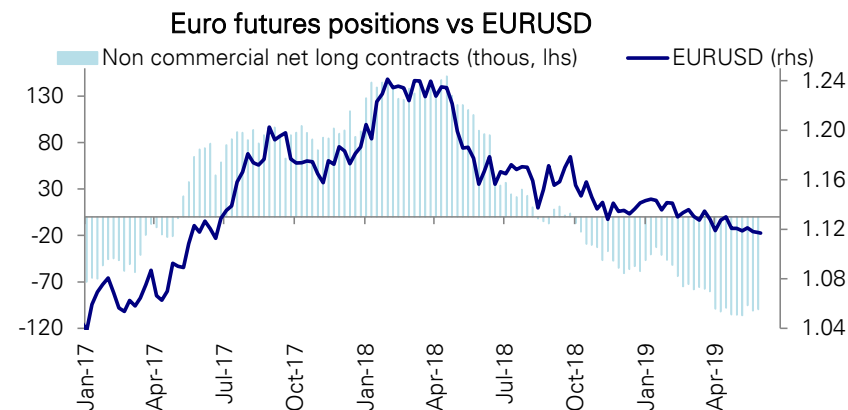


Trade wtd positions in JPY, EUR, GBP, AUD, CHF and CAD

Positioning data as of May 28, 2019

Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

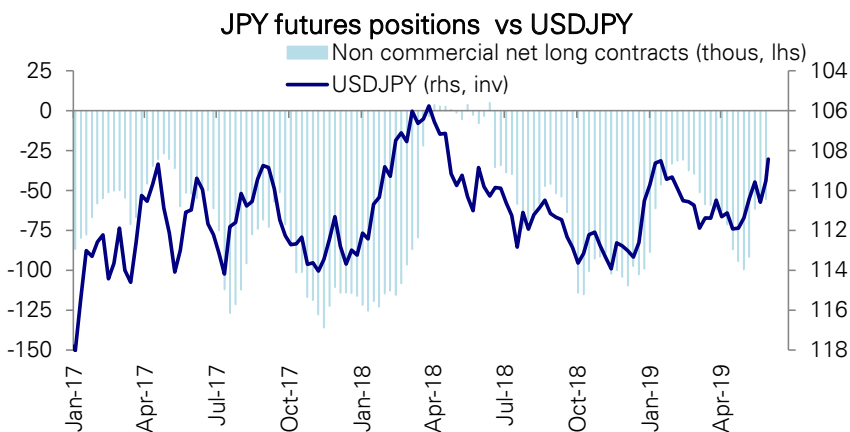
Figure 75: Euro future positions



Positioning data as of May 28, 2019

Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

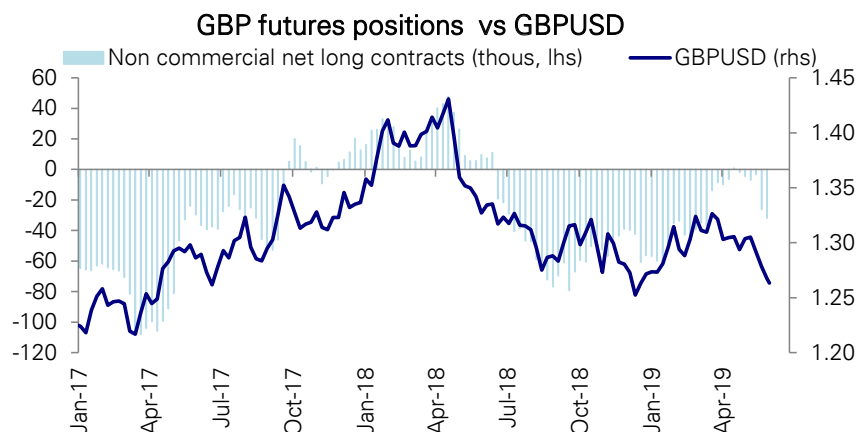
Figure 76: Yen futures positions



Positioning data as of May 28, 2019

Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 77: Sterling futures positions

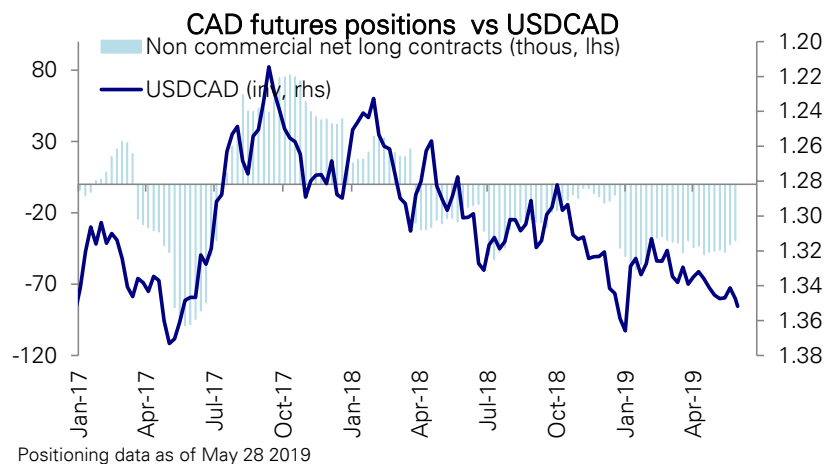


Positioning data as of May 28, 2019

Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

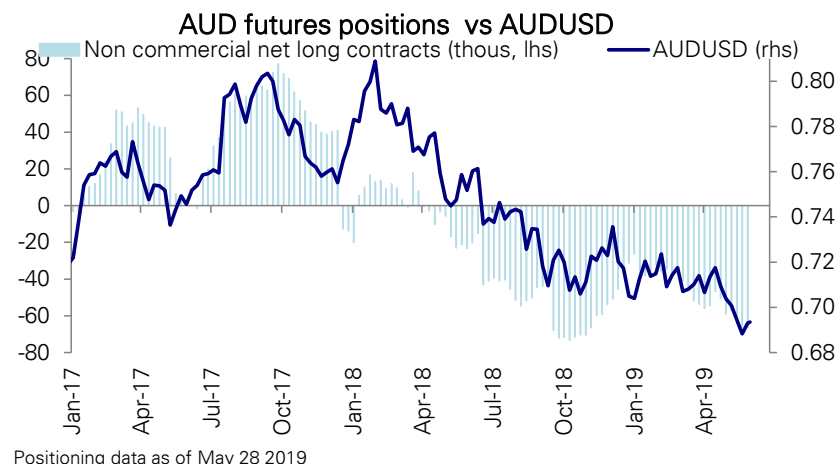


Figure 78: Canadian dollar futures positions



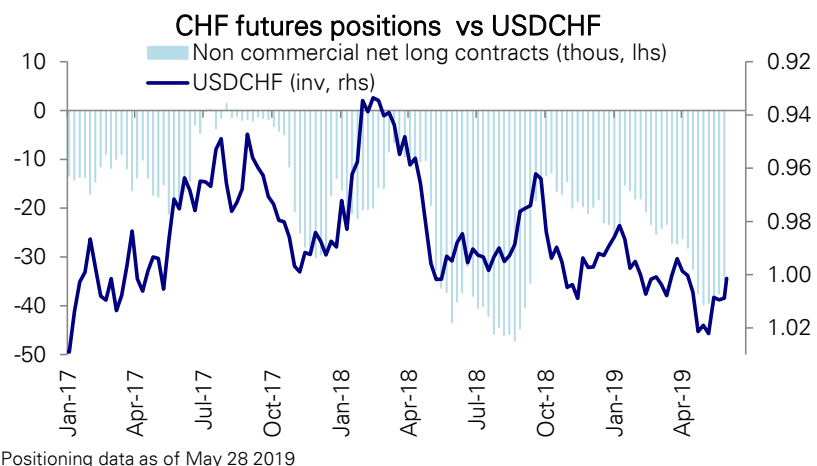
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 79: Aussie dollar futures positions



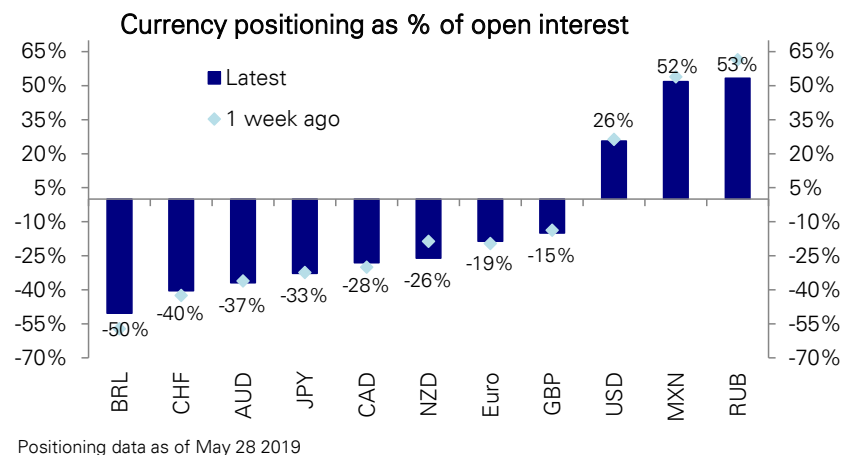
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 80: Swiss franc futures positions



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 81: Currency futures positions

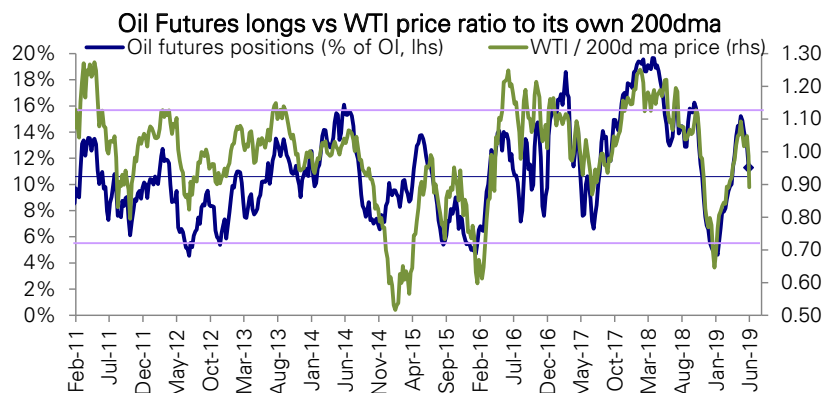


Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics



## Commodity futures positioning

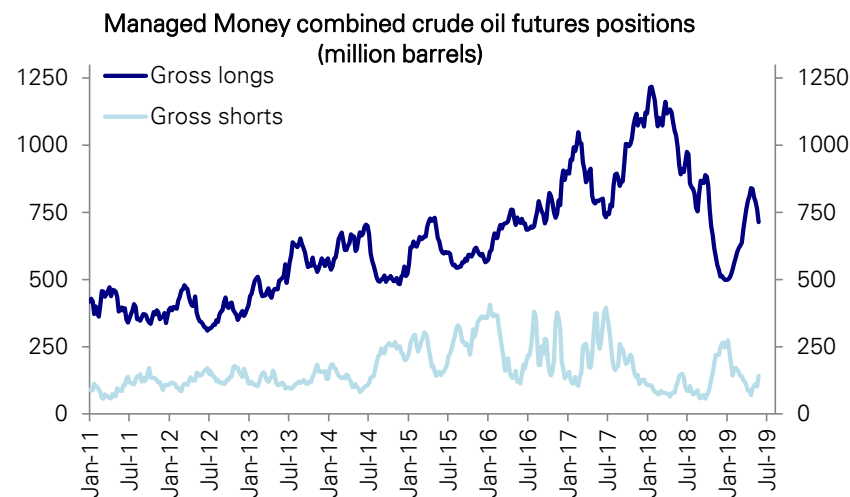
Figure 82: Oil futures positioning



Note: Net positions of combined WTI and Brent crude oil positions; Positioning data as of May 28 2019

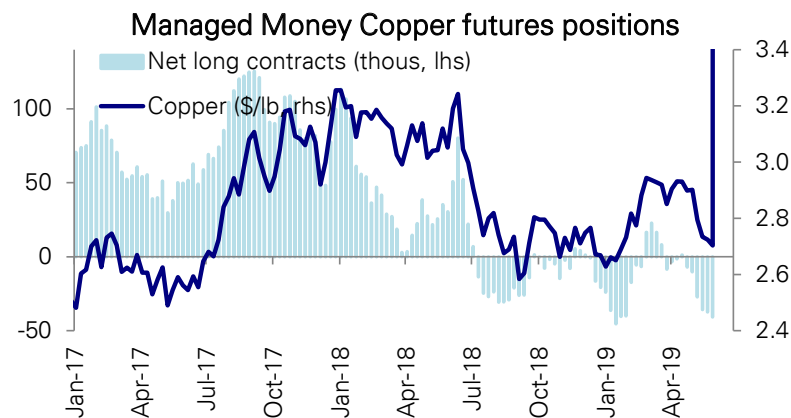
Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 83: Oil futures gross longs vs shorts



Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

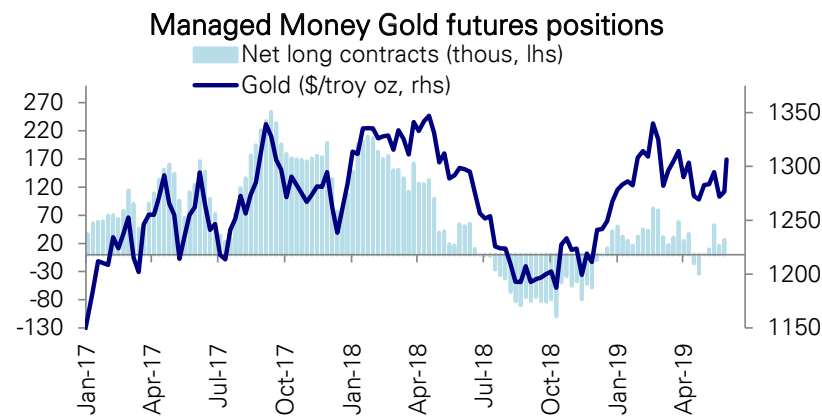
Figure 84: Copper futures positioning



Positioning data as of May 28 2019

Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics

Figure 85: Gold futures positioning



Positioning data as of May 28 2019

Source : Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics



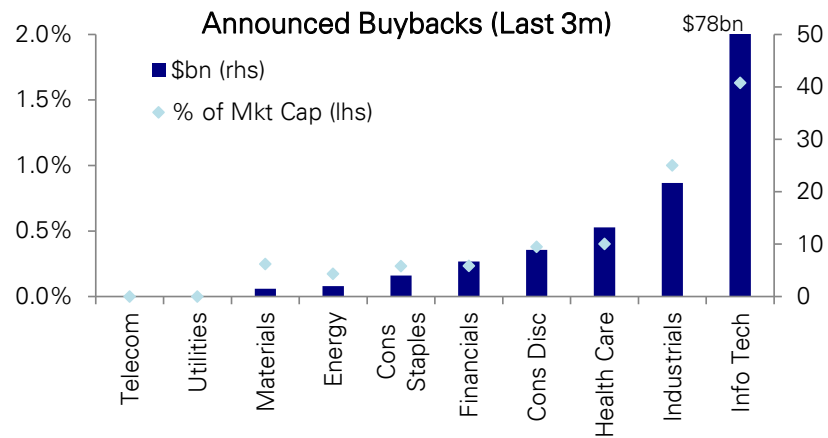
Buybacks Tracker

Figure 86: Recently announced buybacks

| Date    | Ticker | Company Name                       | Sector                 | Industry Group            | Mkt Cap (\$ m) | Buyback Programs |        | Excess Returns |            |
|---------|--------|------------------------------------|------------------------|---------------------------|----------------|------------------|--------|----------------|------------|
|         |        |                                    |                        |                           |                | \$mn             | % mcap | (-1d to +1d)   | Since Ann. |
| 5/30/19 | MSFT   | Microsoft Corp                     | Information Technology | Software & Services       | 963,446        | 1,500            | 0.2%   | 0.4%           | NA         |
| 5/29/19 | KEYS   | Keylight Technologies Inc          | Information Technology | Technology Hardware & Ei  | 13,398         | 500              | 3.7%   | 9.2%           | 11.1%      |
| 5/23/19 | UNIM   | Unum Group                         | Financials             | Insurance                 | 7,051          | 750              | 10.6%  | -0.7%          | -0.9%      |
| 5/16/19 | PHM    | PulteGroup Inc                     | Consumer Discretionary | Consumer Durables & Apr   | 8,960          | 500              | 5.6%   | 1.4%           | 0.5%       |
| 5/15/19 | PGR    | Progressive Corp/The               | Financials             | Insurance                 | 45,259         | 1,938            | 4.3%   | 4.2%           | 5.5%       |
| 5/14/19 | RL     | Ralph Lauren Corp                  | Consumer Discretionary | Consumer Durables & Apr   | 8,959          | 600              | 6.7%   | -3.6%          | -6.3%      |
| 5/9/19  | SYF    | Synchrony Financial                | Financials             | Diversified Financials    | 23,712         | 4,000            | 16.9%  | 3.4%           | 2.2%       |
| 5/9/19  | TSCO   | Tractor Supply Co                  | Consumer Discretionary | Retailing                 | 12,411         | 1,500            | 12.1%  | 1.1%           | 1.4%       |
| 5/9/19  | TPR    | Tapestry Inc                       | Consumer Discretionary | Consumer Durables & Apr   | 9,679          | 1,000            | 10.3%  | 4.7%           | -12.3%     |
| 5/8/19  | EW     | Edwards Lifesciences Corp          | Health Care            | Health Care Equipment & I | 37,065         | 1,000            | 2.7%   | 2.1%           | -1.4%      |
| 5/7/19  | FANG   | Diamondback Energy Inc             | Energy                 | Energy                    | 16,170         | 2,000            | 12.4%  | 6.9%           | 5.5%       |
| 5/3/19  | JCI    | Johnson Controls International plc | Industrials            | Capital Goods             | 35,546         | 4,000            | 11.3%  | 1.0%           | 3.5%       |
| 5/2/19  | ANET   | Arista Networks Inc                | Information Technology | Technology Hardware & Ei  | 23,782         | 1,000            | 4.2%   | -11.1%         | -16.0%     |
| 4/30/19 | AAPL   | Apple Inc                          | Information Technology | Technology Hardware & Ei  | 946,215        | 75,000           | 7.9%   | 3.5%           | -5.7%      |
| 4/29/19 | HON    | Honeywell International Inc        | Industrials            | Capital Goods             | 125,680        | 7,700            | 6.1%   | 0.6%           | 1.4%       |
| 4/26/19 | COST   | Costco Wholesale Corp              | Consumer Staples       | Food & Staples Retailing  | 107,252        | 4,000            | 3.7%   | -1.1%          | 4.3%       |
| 4/24/19 | GWV    | VWV Grainger Inc                   | Industrials            | Capital Goods             | 16,320         | 1,472            | 9.0%   | 0.9%           | -5.1%      |
| 4/18/19 | CE     | Celanese Corp                      | Materials              | Materials                 | 13,448         | 1,500            | 11.2%  | -1.2%          | -2.0%      |
| 4/9/19  | CERN   | Cerner Corp                        | Health Care            | Health Care Equipment & I | 20,425         | 1,200            | 5.9%   | 11.8%          | 14.5%      |
| 3/26/19 | PVH    | PVH Corp                           | Consumer Discretionary | Consumer Durables & Apr   | 8,338          | 750              | 9.0%   | 1.3%           | -22.5%     |
| 3/24/19 | BIIB   | Biogen Inc                         | Health Care            | Pharmaceuticals, Biotech  | 42,629         | 5,000            | 11.7%  | 1.7%           | 3.3%       |
| 3/22/19 | PFG    | Principal Financial Group Inc      | Financials             | Insurance                 | 13,763         | 7                | 0.1%   | -2.7%          | 9.5%       |
| 3/20/19 | AZO    | AutoZone Inc                       | Consumer Discretionary | Retailing                 | 24,414         | 1,000            | 4.1%   | 1.5%           | 7.4%       |
| 3/13/19 | DG     | Dollar General Corp                | Consumer Discretionary | Retailing                 | 31,725         | 1,000            | 3.2%   | -7.3%          | 5.9%       |
| 3/8/19  | MDT    | Medtronic PLC                      | Health Care            | Health Care Equipment & I | 121,401        | 6,000            | 4.9%   | -0.3%          | 0.7%       |

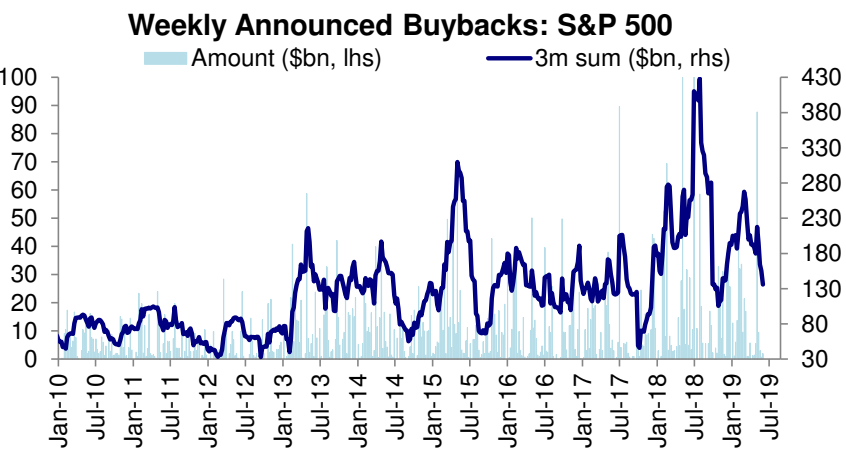
Source : Bloomberg Finance LP, Factset, DB US Equity Strategy

Figure 88: S&P 500 sectors announced buybacks



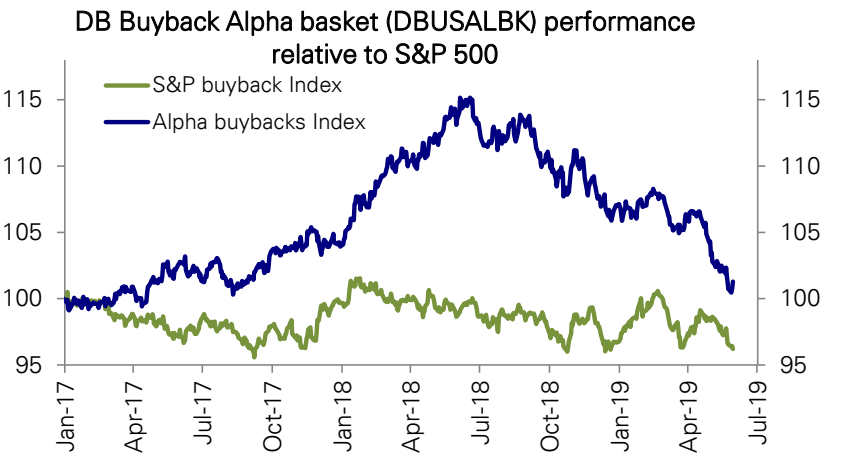
Source : Bloomberg Finance LP, DB US Equity Strategy

Figure 87: S&P 500 weekly announced buybacks



Source : Bloomberg Finance LP, DB US Equity Strategy

Figure 89: Buyback baskets performance



Source : Bloomberg Finance LP, DB US Equity Strategy



31 May 2019

Investor Positioning and Flows



# Appendix 1

## Important Disclosures

### \*Other information available upon request

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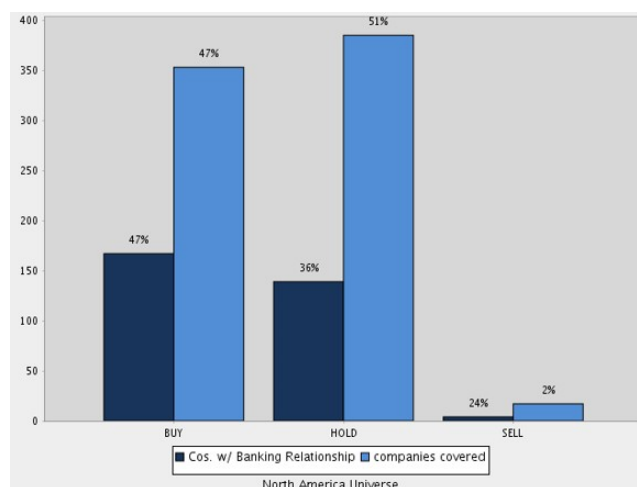
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