Deutsche Bank Research







Date
1 March 2019
Strategy Update

Demand-Supply Dynamics Remain Supportive For Equities

After the near 20% rally off of the lows, the S&P 500 is back in line with current growth, positioning is in the middle of its historical range, while vol has fallen sharply. Growth in the US has been weakening but is potentially bottoming in the rest of the world, the primary source of slowing last year. Against this backdrop, in the absence of large negative catalysts, we see demand-supply dynamics still supportive for equities.

US growth has been weakening but is potentially bottoming in the rest of the world

The latest global manufacturing PMI suggests that growth in the rest of the world, which had been declining persistently since early 2018 may be bottoming, with a small increase this month in RoW PMI, mostly driven by China. Data surprises in the US have turned modestly negative but those in Europe bounced back up to neutral and in EM turned positive.

Rising yields should prompt a rotation away from bond funds and into equities

After being in a tight range for the last month, bond yields have risen sharply this week. Historically this has been a good leading indicator of slowing inflows into bond funds or even outflows, with equities typically benefiting. This adds to the significant rotation we expect out of money market funds which has also historically helped equities (The Beneficiaries Of Money Market Fund Outflows, Feb 22 2019). This week, US equities (+\$9.1bn) saw their first inflow in 3 months but strong outflows from Europe (-\$4.1bn) have continued. EM (-\$0.2bn) and Japan (-\$0.9bn) saw modest outflows again this week following several months of strong inflows.

Buybacks remain a strong source of support

The pace of buyback announcements has picked up again over the last 3 months (\$260bn), matching that of early last year but below the tax cut induced surge in mid-2018. Despite the adverse attention focused on buybacks currently, the market continues to reward companies with large buybacks. So far this year our buyback baskets (DBUSALBK +12.4% and DBUSBBCK +15.5%) have both outperformed the S&P 500 (+12.3%). As long as earnings do not decline sharply we see the pace of buybacks continuing in line with the record pace of almost a net \$700bn in 2018, i.e., almost \$15bn a week.

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Equity positioning is in the middle of its range and in line with growth

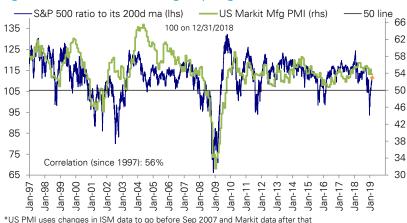
- Equity futures positions are in the middle of their historical range. Equity futures net long positions had been declining through the rally this year as per CFTC data available till February 19th. Moves in S&P 500 repo this week indicate that positions have now likely increased modestly. After being near the top of their historical range in early October we estimate they are now in the middle and also in line with growth (ISM).
- Vol Control is near full equity allocation, would sell quickly on a vol spike. After some marginal buying this week, we estimate that Vol Control has another \$12-\$15bn to buy if volatility metrics drop further in a quiet market. VIX was relatively flat this week sitting just above 14. 1M realized vol dropped below 9 today with only 1 trading day registering a move greater than 50bps in the past two weeks. Risk from Vol Control is to the downside, as these funds would sell quickly on a significant vol spike potentially re-enforcing a sell-off.
- CTAs are net long S&P 500 and most equity indices. More CTAs continued to flip long S&P 500 this week as spot moved slightly higher and short-term moving averages continued to cross longer-term moving averages. CTAs have also flipped long other equity indices and are net long equities more broadly after ending 2018 net short equities. CTAs are still net short DAX and Nikkei, as these indices haven't rebounded as sharply in 2019. CTAs are still long US Treasuries and USD.
- Risk Parity is slowly adding equity exposure with \$55-\$65bn to buy over the next 4-6 weeks if volatility stays low and cross asset correlations are stable. Risk Parity managers started re-risking in fixed income then started buying equities in the past two weeks. Realized volatility of the cross asset portfolio is dropping, and we expect equity buying to continue as long as this trend continues. Without a significant vol spike, we expect Risk Parity will be a tailwind for equities over the next 4-6 weeks.
- L/S Equity Gross Leverage is at YTD highs but still low relative to history. With solid +5.8% returns YTD, Equity L/S Hedge Funds have steadily increased Gross Leverage from a multi-year bottom at the end of 2018. However Gross Leverage is still low relative to its historical range. Stock volumes picked up this week, but ETF volumes and SPX options volumes were relatively light. Top Hedge Fund shorts as % of float (DBUSXSIF) outperformed in the last week of February putting a drag on returns, however L/S Equity is running relatively high net betas with short interest across the market near historical lows. Our Leverage and Value Fast Factors were down this week as highly leveraged and cheap companies underperformed.

CFTC data for Feb 19th: Rising dollar and oil net long positions

Bond shorts fell slightly while dollar longs rose, mostly on the back of rising Euro shorts. Within commodities, oil net longs continued to climb higher, copper net positions remained near neutral while gold longs rose sharply. Net EM equity long positions remained near record highs.

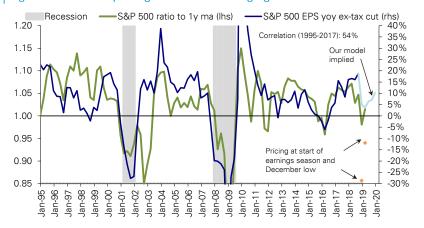
Pricing, positioning and vol in line with growth

Figure 1: The S&P 500 has caught up to growth



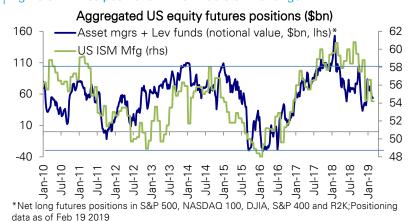
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Markit, ISM, Haver

Figure 2: S&P 500 pricing in current earnings growth



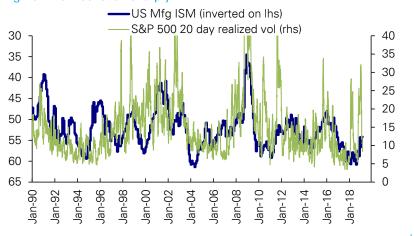
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Haver, Factset, Bloomberg Finance LP

Figure 3: Futures positions in the middle of the range



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

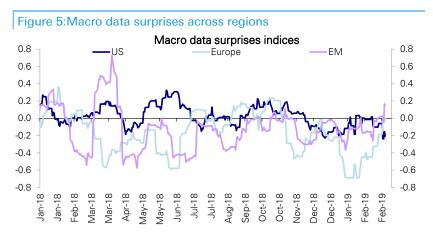
Figure 4:Vol has fallen sharply

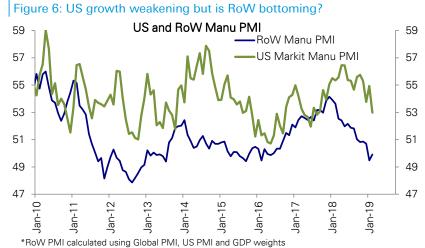


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP



Growth weakening in the US but potentially bottoming in the rest of the world

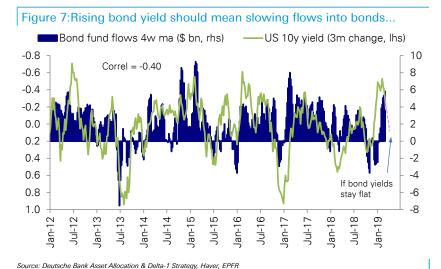


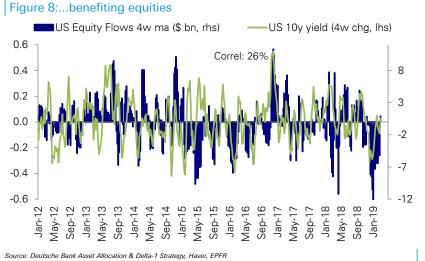


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Haver

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

Rising yields should prompt rotation away from bonds and into equities

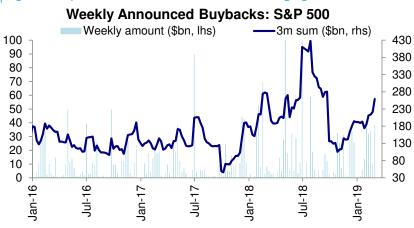




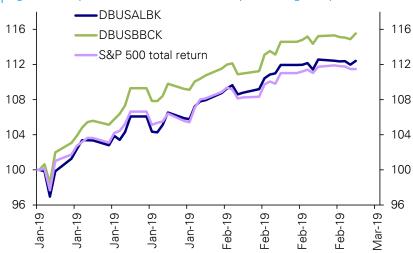


Buybacks remain very supportive

Figure 9:Buyback announcements have been rising again







Note: DBUSALBK is DB US Alpha Buyback basket and DBUSBBCK is buyback announcements over the last 6M

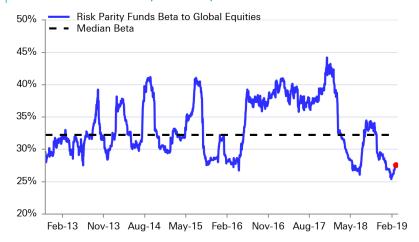
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP

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



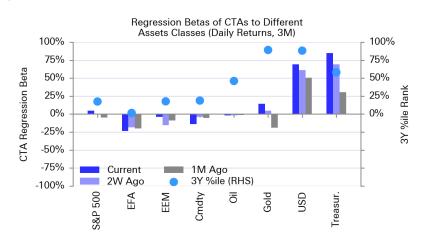
vFLARE: Volatility-Sensitive Systematic Strategies

Figure 11: Risk Parity will continue to buy \$55-65bn in equities over the next 4-6 weeks if volatility doesn't spike



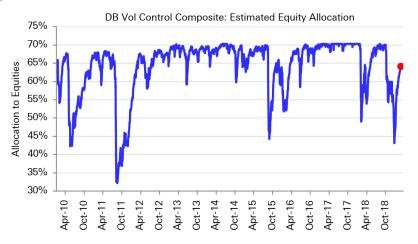
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 27-Feb-19

Figure 13: CTAs are net long S&P 500 and equities generally, except DAX and Nikkei



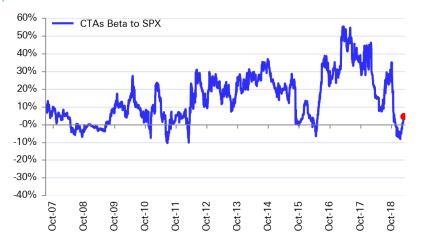
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 27-Feb-19

Figure 12:Vol Control has \$12-\$15bn to buy to full equity allocation, risk is to the downside if volatility spikes and triggers selling



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 27-Feb-19

Figure 14: In aggregate, CTAs are net long S&P 500 with more switching this week



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 27-Feb-19



S&P 500 futures volumes remain light relative to Q4'18 and on-screen liquidity remains low

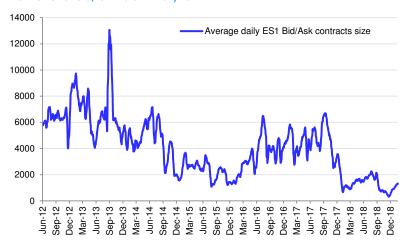
Figure 15: Equity futures positioning is typically correlated with price moves



Net long futures positions in S&P 500, NASDAQ 100, DJIA, S&P 400 and R2K. Positioning data as of 19 Feb 2019

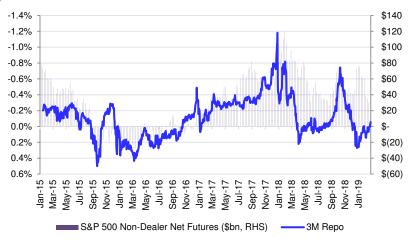
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 28-Feb-19.

Figure 17: Order book depth for ES1 futures has retraced back to mid-2018 levels, but is still very low



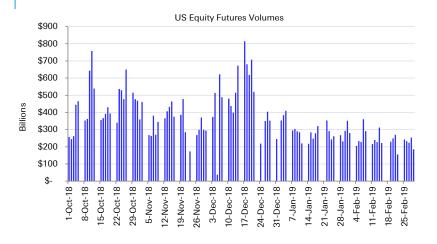
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy. Data as of 28-Feb-19.

Figure 16: Repo (implied financing) drop implies a likely recovery in futures positioning during the week



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

Figure 18: US equity futures volumes remain low YTD vs Q4'18

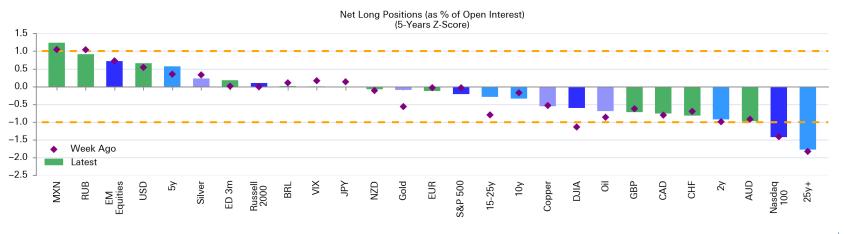


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Reuters, Bloomberg Finance LP, Data as of 22-Feb-19.



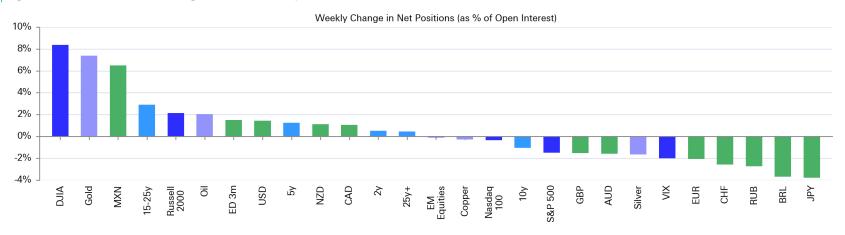
Cross-Asset Futures Positioning and Flows

Figure 19: Investor positioning in cross asset futures as of February 19th



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



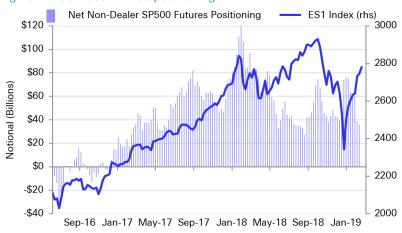


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 19-Feb-19



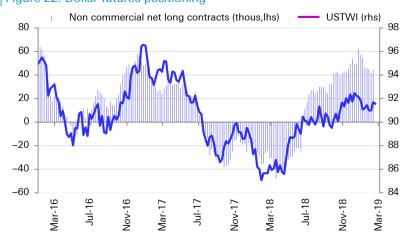
Futures Positioning: US Equities, USD, WTI Oil, & 10Y Treasuries

Figure 21: S&P 500 futures positioning



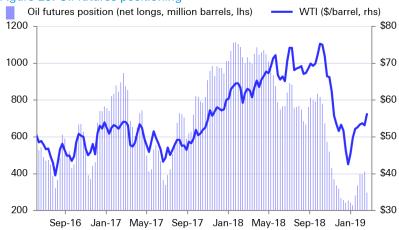
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 19-Feb-19

Figure 22: Dollar futures positioning



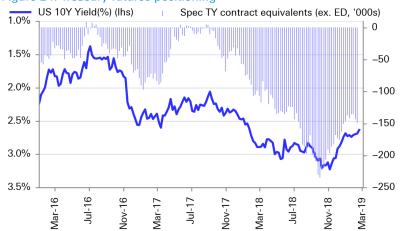
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 19-Feb-19





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

Figure 24: Treasury futures positioning

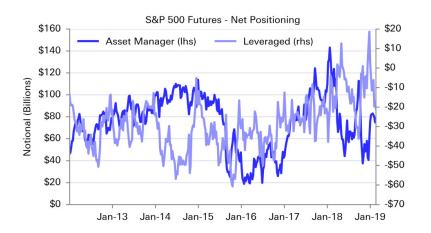


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 19-Feb-19.



Futures Positioning: US Equities

Figure 25: Leveraged Funds and Asset Managers futures positioning



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

-1.5% -1.5% -1.7% -1.7% -1.9% -1.9% -2.1% -2.1% -2.3% -2.3% -2.5% -2.5% -2.7% -2.7%

Figure 26: Aggregate futures positions and shorts in single stocks and

·Net longs in futures minus shorts in cash equities (% of SPX mcap, rhs)

ETFs

-2.9% -2.9% -3.1% -3.1% -3.3% -3.3% -3.5% -3.5% Jul-15 Jul-14 Jan-15 Jan-16 Jul-16 Jul-11 Jul-12 Jul-13 Jan-14 Jul-17 Note: Futures net longs minus single stock and ETF shorts. Shorts data as of Feb 15, S&P futures Feb 19

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

Figure 27: US equity futures positioning - 1Y Percentile Ranks

	SPX	RTY	NDX	DJIA	MSCI EM	MSCI EAFE
ND-LONG	2%	28%	25%	32%	96%	72%
ND-SHORT	36%	83%	17%	58%	57%	45%
ND-NET	4%	19%	47%	23%	96%	72%
AM-LONG	42%	66%	64%	32%	96%	94%
AM-SHORT	25%	98%	77%	96%	47%	40%
AM-NET	57%	38%	53%	11%	96%	96%
LM-LONG	2%	2%	8%	36%	42%	25%
LM-SHORT	28%	2%	13%	19%	98%	66%
LM-NET	19%	43%	49%	64%	8%	21%
OT-LONG	2%	4%	55%	49%	34%	98%
OT-SHORT	100%	100%	32%	66%	4%	32%
OT-NET	2%	2%	66%	36%	60%	98%

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

Figure 28: US equity futures WoW Change - 1Y Z-score

	SPX	RTY	NDX	DJIA	MSCI EM	MSCI EAFE
ND-LONG	0.12	0.62	0.2	0.41	-0.29	0.71
ND-SHORT	0.68	-0.17	0.47	-1.45	-0.23	0.47
ND-NET	-0.54	0.96	-0.11	1.31	-0.18	0.45
AM-LONG	0.29	0.55	0.31	-0.14	-0.66	0.45
AM-SHORT	0.49	-0.26	0.26	-2.69	-0.31	0.2
AM-NET	0.05	0.69	0.1	1.35	-0.47	0.37
LM-LONG	-0.24	0.11	-0.09	0.63	1.17	0.68
LM-SHORT	0.58	-0.34	0.19	-0.15	0.08	0.45
LM-NET	-0.58	0.39	-0.2	0.68	0.78	0.02
OT-LONG	-0.44	0.26	0.1	-0.34	0.12	0.16
OT-SHORT	0.18	2.2	0.47	-0.12	-0.01	-0.35
OT-NET	-0.43	-1.19	-0.34	-0.02	0.09	0.26

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



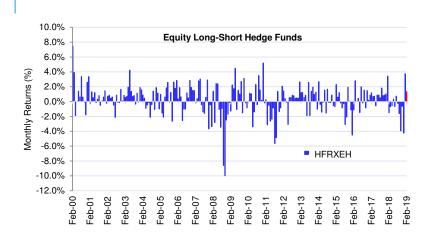
Equity L/S Hedge Funds returns are +5% YTD but Gross Leverage has not recuperated completely

Figure 29: Hedge Fund's top \$-longs continue to outperform top \$-shorts YTD



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

Figure 30:Equity L/S Hedge Fund returns are +5.3% YTD



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP. Data as of 27-Feb-19.

Figure 31: Gross Leverage for L/S Equity Hedge Funds has increased steadily YTD

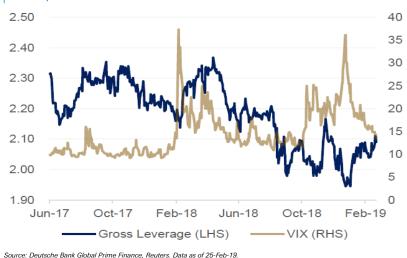


Figure 32: Net Exposure of Equity L/S Hedge Funds fell marginally from 12M highs

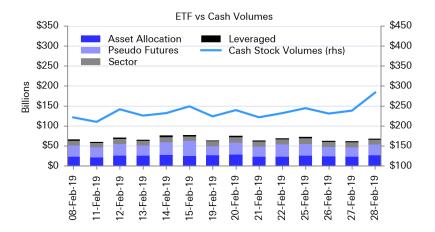


Source: Deutsche Bank Global Prime Finance, Reuters. Data as of 25-Feb-19. Net Bias is Net Exposure/Gross Exposure



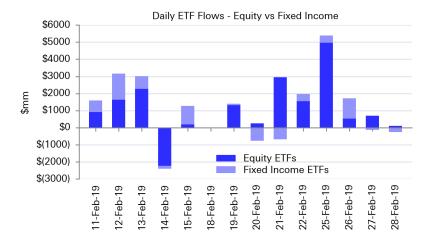
ETFs: Volumes and Flows

Figure 33: Stock and ETF volumes have been relatively light in February



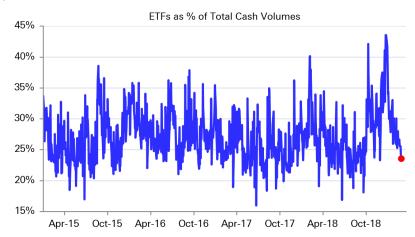
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Reuters, Bloomberg Finance LP, Data as of 28-Feb-19

Figure 35: Equity ETFs got inflows this week, along with Fixed Income ETFs



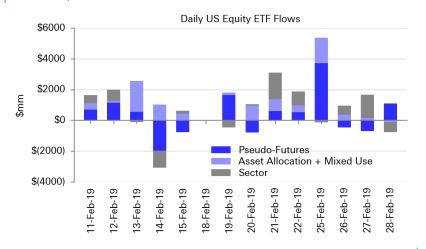
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Reuters, Bloomberg Finance LP, Data as of 28-Feb-19.

Figure 34: ETF participation in cash trading volumes was at YTD lows this week



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

Figure 36: US Equity ETFs inflows this week were mainly to asset allocation products



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



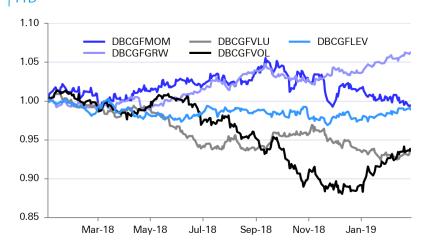
Equity Premia: Except Momentum, most long-short factors rallied with the market

Figure 37: US Fast Factors: Momentum stopped sliding and Growth rallied YTD



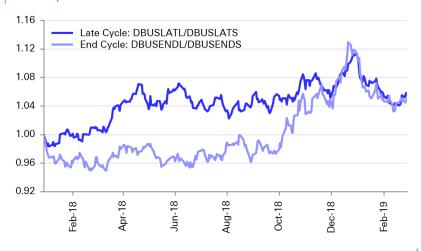
Source:Deutsche Bank Quantitative & Delta-1 Strategy, Axioma, Factset, Bloomberg Finance LP, Data as of 28-Feb-19

Figure 38: Europe Fast Factors: Residual Volatility has rallied sharply



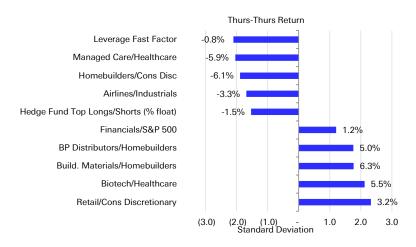
Source:Deutsche Bank Quantitative & Delta-1 Strategy, Axioma, Factset, Bloomberg Finance LP, Data as of 28-Feb-19

Figure 39: Market has re-priced recession risk YTD as shown by our macro-cycle baskets



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

Figure 40: Homebuilders and Biotech industries outperformed this week

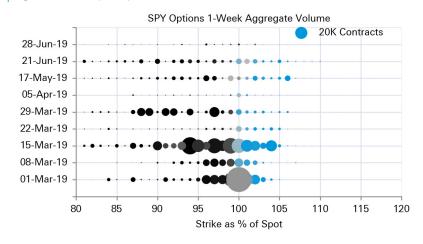


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Axioma, Factset, Bloomberg Finance LP, Data as of 28-Feb-19



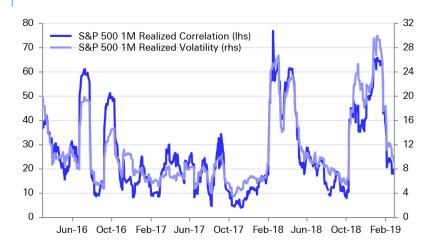
S&P 500 Options: Open Interest, Vol, Skew, Correlation

Figure 41: SPY put options were more active than calls this week



Source: Deutsche Bank Quant & Delta-1 Strategy, OptionMetrics, Bloomberg Finance LP. Data as of 27-Feb-19.

Figure 43: 1M realized correlation dropped with realized volatility



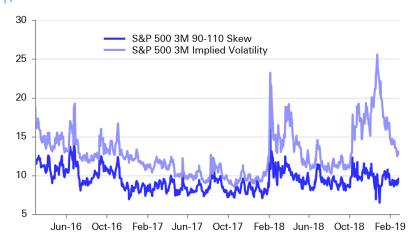
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP, Reuters. Data as of 28-Feb-19.

Figure 42: Put-call ratio for S&P 500 back in range from recent lows



Source: Deutsche Bank Quant & Delta-1 Strategy, OptionMetrics, Bloomberg Finance LP. Data as of 28-Feb-19

Figure 44: Implied volatility has come in significantly, and skew dropped post-Fed

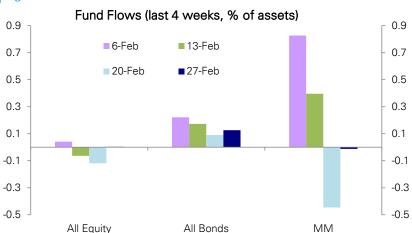


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP, Reuters. Data as of 28-Feb-19.



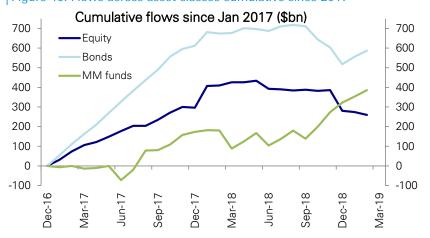
Cross-asset flows

Figure 45: Flows across asset classes last 4 weeks



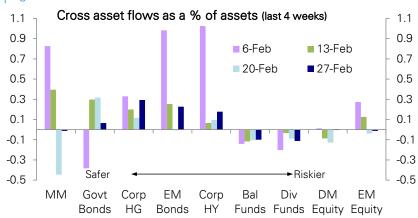
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

Figure 46: Flows across asset classes cumulative since 2017



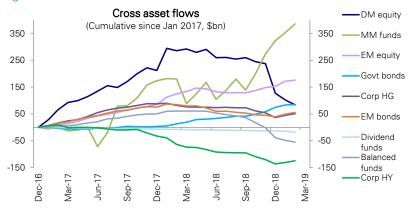
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

Figure 47: Cross asset flows last 4 weeks



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

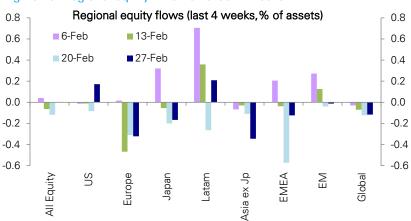
Figure 48: Cross asset flows cumulative since 2017





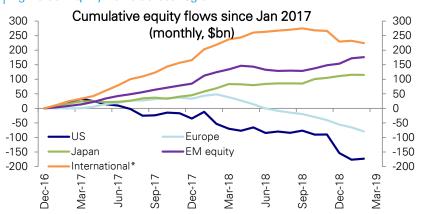
Equity Flows

Figure 49: Regional equity fund flows last 4 weeks



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

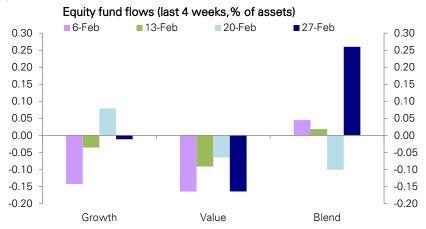
Figure 50: Equity flows across region



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

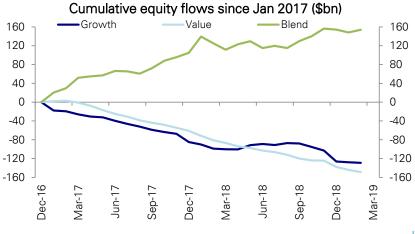
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

Figure 51: Equity flows by fund style last 4 weeks



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

Figure 52: Equity flows by fund style





25

0

-25

-50

-75

Mar-19

-0.15

-0.20

Figure 53: Equity fund flows by size last 4 weeks Equity fund flows (last 4 weeks, % of assets) 0.15 0.15 6-Feb ■ 13-Feb 0.10 0.10 20-Feb ■ 27-Feb 0.05 0.05 0.00 0.00 -0.05 -0.05 -0.10-0.10

Mid cap

Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

Figure 54: Equity fund flows by size 25 -25 -50 -0.15 -75 -0.20

Small cap

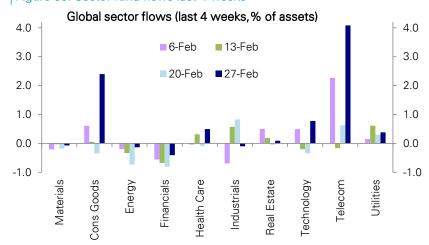
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

Sep-17

—Large cap

Figure 55: Sector fund flows last 4 weeks

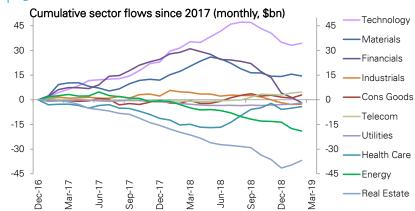
Large cap



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

Figure 56: Sector fund flows

Mar-17



Cumulative equity flows since Jan 2017 (\$bn)

-Mid cap

Mar-18

Dec-17

Jun-18

Sep-18

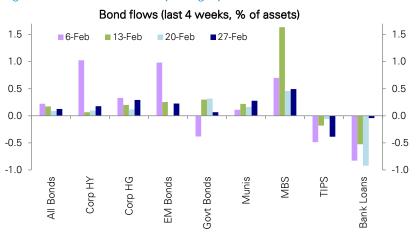
Dec-18

Small cap



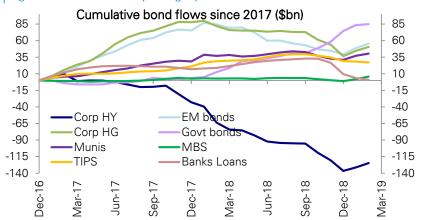
Bond fund flows

Figure 57: Bond fund flows by category last 4 weeks



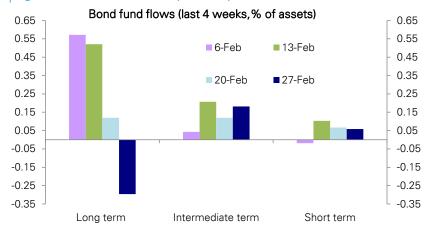
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

Figure 58: Bond flows by category



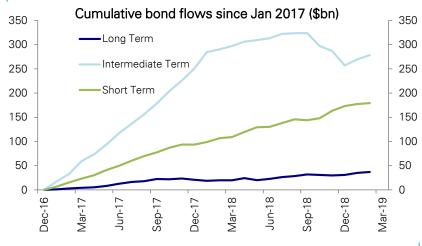
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

Figure 59: Bond fund flows by maturity last 4 weeks



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 27-Feb-19

Figure 60: Bond fund flows by maturity





Equity futures positioning - CFTC data as of Feb 19, 2019

Figure 61: Aggregate US equity futures positioning



Positioning data as of Feb 19 2019

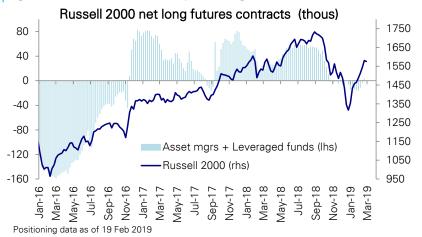
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 63: US equity futures positioning



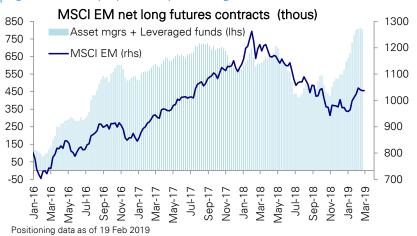
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 62: Russell 2000 futures positioning



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

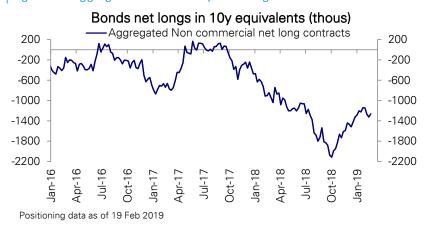
Figure 64: EM equity futures positioning





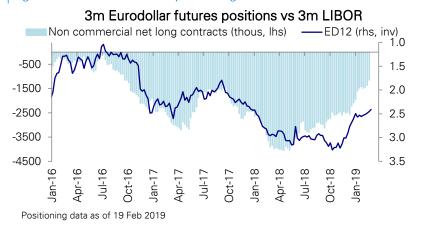
Bond futures positioning - CFTC data as of Feb 19, 2019

Figure 65: Aggregate bond futures positioning



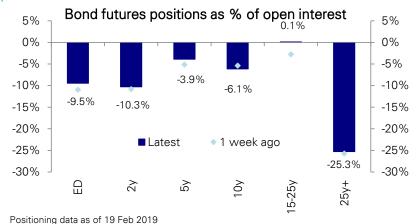
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 67: Eurodollar futures positioning



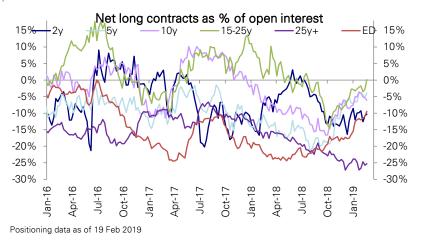
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 66: Bond futures positioning by maturity



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 68: Bond futures positioning by maturity





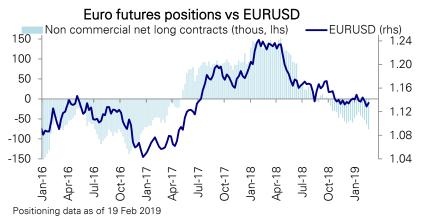
FX futures positioning - CFTC data as of Feb 19, 2019

Figure 69: Trade weighted dollar positioning



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

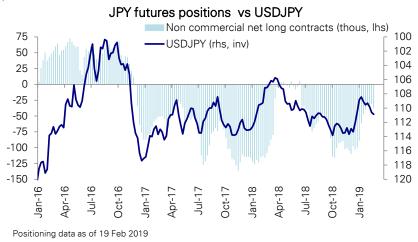
Figure 70: Euro futures positioning



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 71: Yen futures positioning

Positioning data as of 19-Feb 2019



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 72: Canadian dollar futures positioning

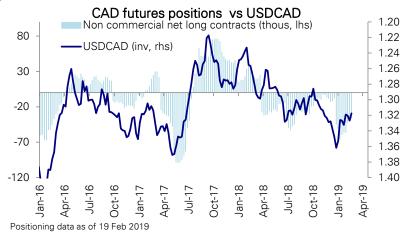
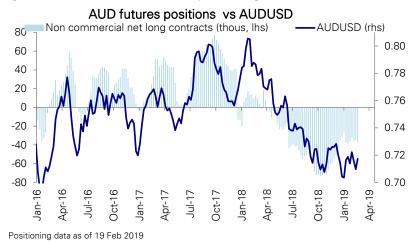


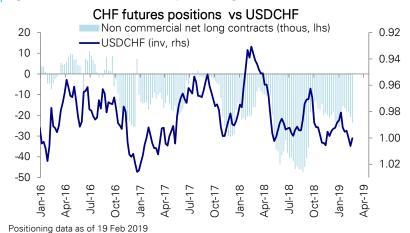


Figure 73: Australian dollar futures positioning



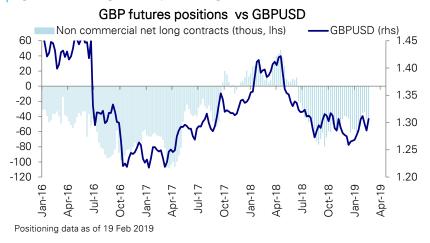
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 75: Swiss franc futures positioning



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 74: Sterling futures positioning



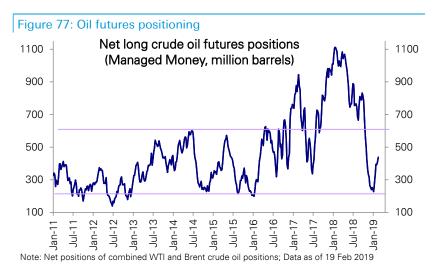
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 76: Futures positioning across currencies





Commodity futures positioning - CFTC data as of Feb 19, 2019

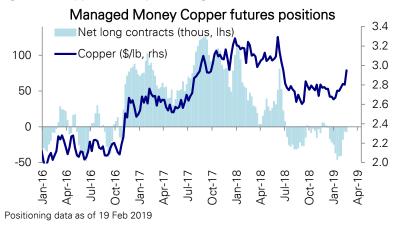


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 78: Oil futures gross longs vs shorts Managed Money combined crude oil futures positions (million barrels) 1250 -Gross longs 1250 Gross shorts 1000 1000 750 750 500 500 250 250 0 Jan-16 Apr-16 Apr-18 Jul-18 Jan-19 Jul-16 Oct-16 Jan-18 Oct-18 Jan-17 Apr-17 Jul-17 Oct-17

Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

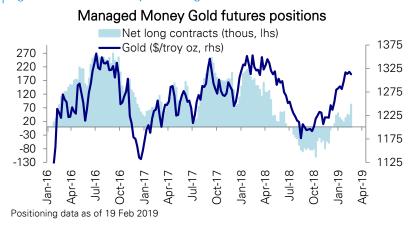




Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 19-Feb-19

Figure 80: Gold futures positioning

Positioning data as of 19 Feb 2019







Appendix 1

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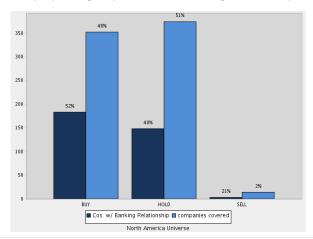
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