## Deutsche Bank Research

North America

# Asset Allocation & Delta-1 Strategy Investor Positioning and Flows



9 November 2018
Strategy Update

# Oil Overvaluation Corrects

#### Oil price decline reflects a correction from extremely overvalued levels

Attention has focused on the sharp decline in oil prices since early October (-21%) and what they may potentially be signaling about global growth. Our view has been that beginning in April, oil prices began rising as the market focused on diminished supply first from Venezuela and then Iran as the US pulled out of the nuclear deal. The increase in oil prices occurred against the backdrop of a rising US dollar and moderating global growth (PMIs), with the two historically explaining medium term fair value for oil extremely well (84%) ( DB: Trading The Commodity Underperformance Cycle, Apr 2013). At the recent peak, we estimate oil prices were above the historical +/- 30% overvaluation band. Despite their recent decline, oil prices remain expensive (+10%).

#### Oil positioning now at a 15 month low

Oil prices have been well correlated with net oil futures positions. Oil positions remain net long, but have now fallen from well above average levels to a 15 month low. The recent decline in net positioning mostly reflects that in gross longs while shorts have gone up modestly.

# Steep decline in active fund relative performance as equities disconnect from growth and rates

Our sample of active mutual funds underperformed the market by 2.7pp starting late July through end October, one of the steepest shortfalls on record. Mutual funds have performed in line with the market over the last week. The underperformance in the last 3 1/2 months largely reflects that in Growth and Blended funds, while Value funds have performed in line. We note that mutual fund performance tends to be tightly tied to the macro cycle and has historically been correlated with rates and macro growth (ISM). As equity market pricing has disconnected from growth and rates, mutual fund performance has suffered ( DB: What's Priced In? Oct 2018 ).

#### Long-short equity hedge funds also saw steep losses in October

Long-short equity HFs lost on average almost -4% in October, the largest monthly loss since February 2016. HF overweights in Technology and Growth-oriented stocks contributed to negative returns, as did outperformance of popular shorts. Going into October, both gross and net leverage was near ytd lows. And our HF signals suggest there was further deleveraging and short covering the last week in October. HF signals and traditional long-short style factors were relatively quiet this week. Volumes were relatively low compared to October, with single-stocks more active relative to ETFs and futures.

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## Systematic strategies yet to meaningfully reallocate to US equities

While there has been some marginal buying by vol control funds and CTAs, a sustained period of lower volatility and higher equity prices would be required for systematic strategies to re-allocate. While the VIX dropped this week, realized volatility actually increased in part due to the magnitude of Wednesday's postelection rally. Vol control funds likely bought a marginal amount of equity exposure early this week but unlikely to add more with vol still elevated. We also note that these funds re-risk more slowly than they de-risk. CTAs likely added equity exposure on Wednesday as S&P 500 moved above its 200dma. This is consistent with the futures basis widening in the later part of the day. However in aggregate, CTA betas to S&P 500 are still close to zero.

# Record inflows into Japan and China equity funds in contrast to outflows elsewhere

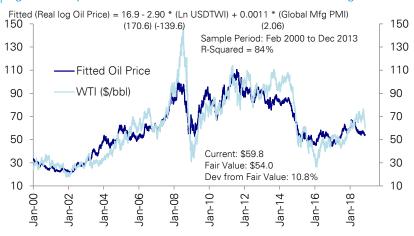
Modest outflows out of US equities (-\$0.9bn) continued this week and Europe continued to suffer strong outflows (-\$2.6bn). In contrast, strong inflows into Japan (\$2.4bn) and China (\$1.7bn) continued this week. Over the last 4 weeks, Japanese equity funds have seen inflows of over \$17bn, the highest on record, while China funds have seen \$9.5bn, the highest in 3 years. The rest of Asia has seen modest inflows in the last 4 weeks, mostly into South Korea while Latam funds have seen inflows return in the last 2 weeks.

#### Bond funds see inflows return

Bond funds saw their first inflow in 7 weeks as robust inflows into government bond funds continued, mostly into short term funds and outflows out of HG credit funds stopped. HY funds saw a modest inflow but outflows out of EM funds continued. Bank loan funds had back to back outflows (-\$0.9bn), the largest this year.

# Oil prices have declined from extremely overvalued levels

Figure 1: Oil prices were overvalued relative to the dollar and growth

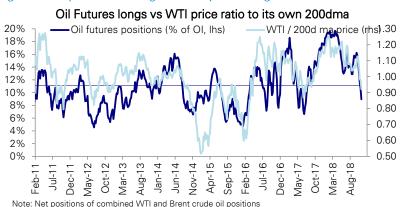


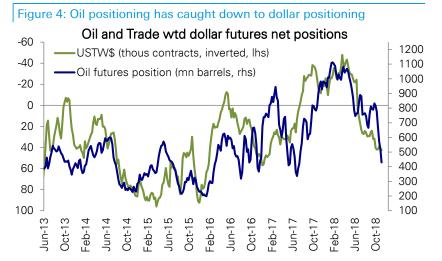
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg, Haver



# Oil positioning at 15 month lows

Figure 3: Oil prices declining with net positioning





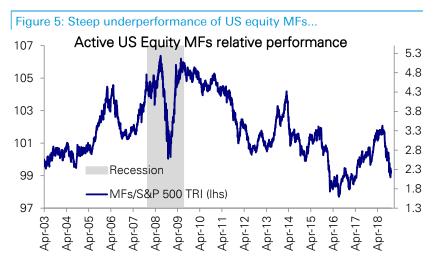
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg, Haver

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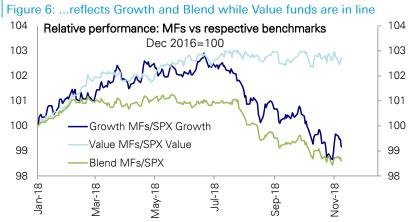
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg, Haver



# Steep underperformance of US active equity mutual funds



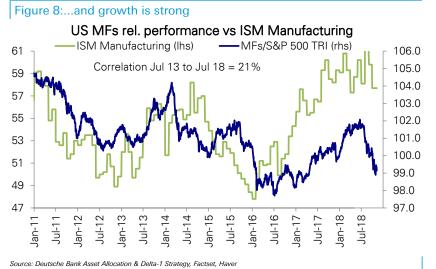
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Havei



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

# Mutual fund performance suffering as equity markets have disconnected from cyclical growth and rates







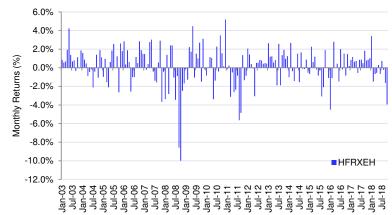
# Long-short Hedge Funds had their worst performance since Q1 2016 in October

Figure 9:Outperformance of Hedge Fund shorts added to losses



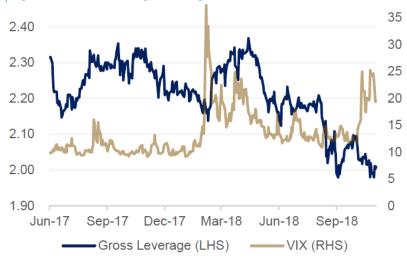
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP

Figure 10:Equity L/S HFs had worst return in Oct since Feb 2016



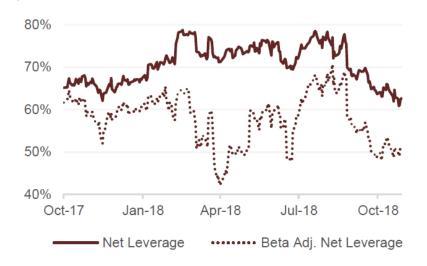
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LF

Figure 11: Gross Leverage of Hedge Funds is at 1Y lows



Source: Deutsche Bank Global Prime Finance. Reuters. Data as of 2-Nov-18

Figure 12: Net Leverage of Hedge Funds is also near 1Y lows

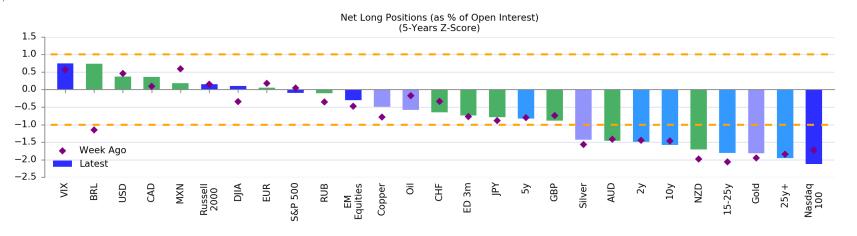


Source: Deutsche Bank Global Prime Finance. Reuters. Data as of 2-Nov-18



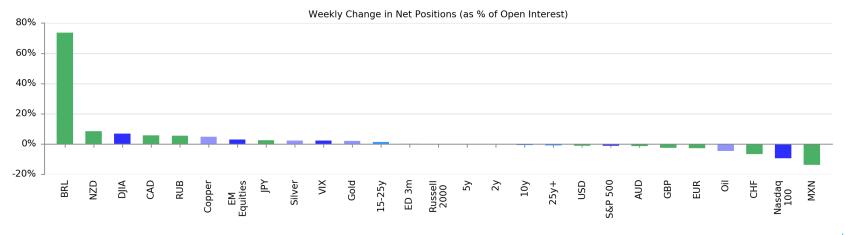
# **Cross-Asset Futures Positioning and Flows**

Figure 13: Investors in aggregate have the most risk in FX futures



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 06-Nov-18.

Figure 14: Investors cut exposure to NASDAQ 100 and DJIA and added to long VIX

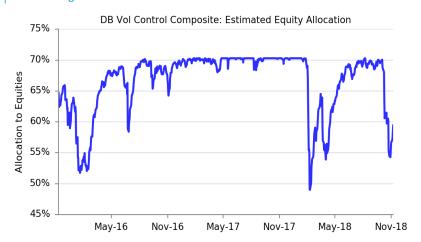


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 06-Nov-18



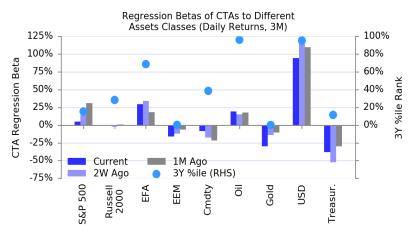
# vFLARE: Volatility-Sensitive Systematic Strategies

Figure 15: Vol control funds won't add more equity exposure if volatility remains high



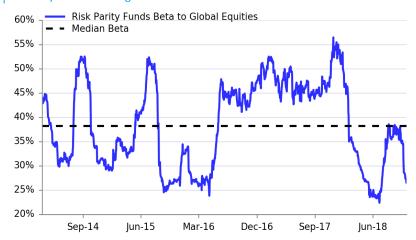
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 08-Nov-18

Figure 17: CTAs cut S&P 500 exposure in recent weeks added to Gold short



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 07-Nov-18

Figure 16: Risk parity likely sold additional equity beta as realized volatility remained high



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 08-Nov-18

Figure 18: Aggregate CTA beta to S&P 500 is close to zero, and some funds likely turned short



Source:Deutsche Bank Asset Allocation & Delta-1 Strategy, SEC filings, Bloomberg Finance LP, Data as of 07-Nov-18



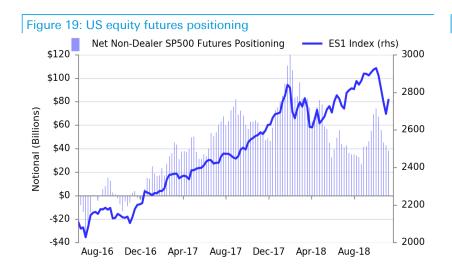
96

94

88

86

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



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 06-Nov-18

Feb-16 Jun-16 Oct-16 Feb-17 Jun-17 Oct-17 Feb-18 Jun-18 Oct-18

Non commercial net long contracts (thous,lhs)

Figure 20: Dollar futures positioning

60

40

20

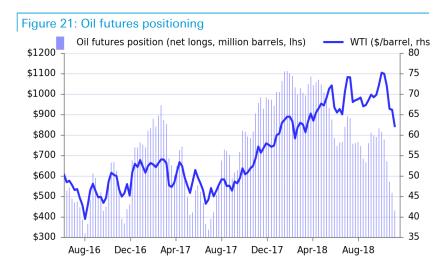
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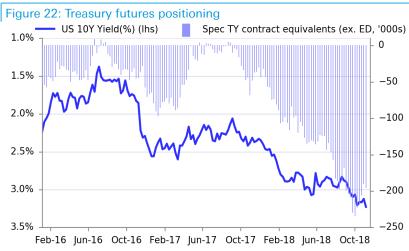
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Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 06-Nov-18



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 06-Nov-18

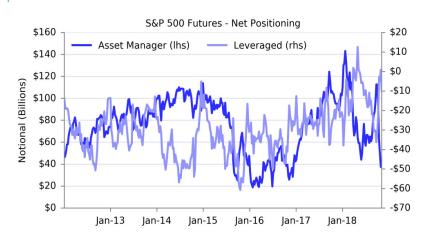


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 06-Nov-18.



# **Futures Positioning: US Equities**

Figure 23: Leveraged Funds and Asset Managers futures positioning



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 06-Nov-18.

Figure 25: Leveraged Funds have lighter US equity exposure than AMs-1Y Percentile Ranks

	SPX	RTY	NDX	DJIA	MSCI EM	MSCI EAFE
ND-LONG	45%	40%	8%	21%	28%	21%
ND-SHORT	9%	45%	57%	100%	19%	62%
ND-NET	57%	43%	8%	9%	49%	13%
AM-LONG	70%	62%	42%	55%	28%	53%
AM-SHORT	15%	87%	15%	100%	72%	74%
AM-NET	92%	42%	62%	6%	25%	51%
LM-LONG	13%	30%	9%	17%	13%	9%
LM-SHORT	36%	13%	77%	8%	4%	32%
LM-NET	26%	66%	11%	34%	85%	17%
OT-LONG	83%	66%	58%	9%	94%	70%
OT-SHORT	43%	75%	85%	8%	58%	81%
OT-NET	87%	28%	17%	34%	81%	17%

Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 06-Nov-18.

Figure 24: Aggregate futures positions and shorts in single stocks and ETFs



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

Figure 26: Leveraged Funds cut short equity exposures - 1Y Z-score of WoW Change

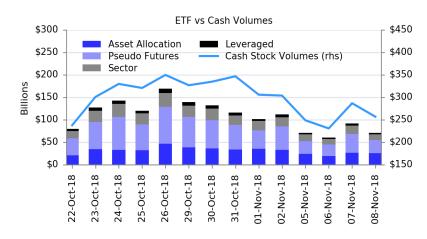
	SPX	RTY	NDX	DJIA	MSCI EM	MSCI EAFE
ND-LONG	0.79	-0.59	0.28	1.88	-0.16	0.87
ND-SHORT	-0.38	1.2	0.24	0.07	0.29	0.26
ND-NET	0.89	-1.15	0.15	1.83	-0.46	0.79
AM-LONG	0.83	0.23	0.52	2.14	0.95	0.81
AM-SHORT	-0.25	1.77	-0.19	-0.0	0.64	-0.15
AM-NET	0.92	-0.51	0.53	1.99	0.73	0.83
LM-LONG	0.75	-1.49	0.15	0.44	-1.95	-0.26
LM-SHORT	-0.57	0.25	0.33	0.1	0.29	0.45
LM-NET	0.96	-1.19	-0.07	0.29	-1.6	-0.44
OT-LONG	-0.93	0.5	-2.85	-1.94	-1.97	0.06
OT-SHORT	0.36	0.01	0.81	0.06	-0.56	-0.42
OT-NET	-0.67	0.3	-2.2	-1.36	-0.33	0.12

Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Data as of 06-Nov-18.



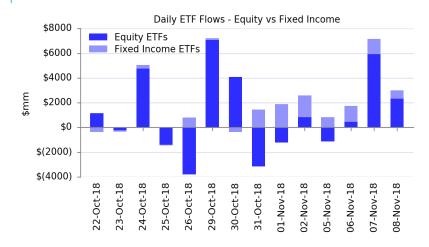
## ETFs: Volumes and Flows

Figure 27: Volumes generally declined this week relative to October



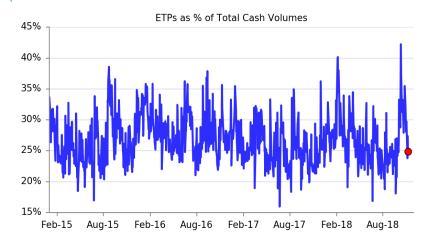
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Reuters, Bloomberg Finance LP, Data as of 08-Nov-18.

Figure 29: ETFs have seen inflows following the recent selloff...



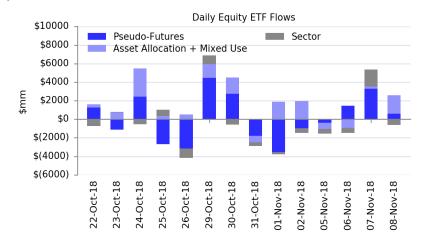
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Reuters, Bloomberg Finance LP, Data as of 08-Nov-18.

Figure 28: ETF volumes were a lower portion of total cash volumes



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Reuters, Bloomberg Finance LP, Data as of 08-Nov-18.

Figure 30: Outflows from equity ETFs have been driven by pseudofutures, not likely asset allocation

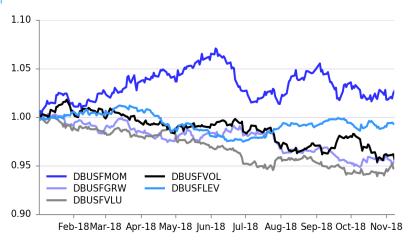


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Factset, Reuters, Bloomberg Finance LP, Data as of 08-Nov-18



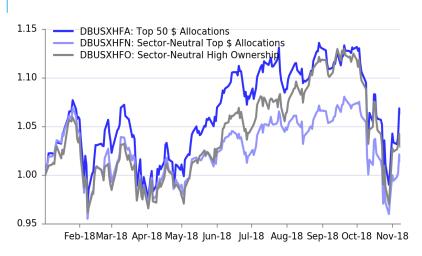
# Equity Premia: Fast Factors, Hedge Funds, Themes

Figure 31: US Fast Factors: Growth factor outperformed Value for much of last week



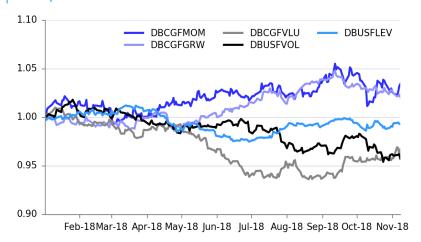
Source: Deutsche Bank Quantitative & Delta-1 Strategy, Axioma, Factset, Bloomberg Finance LP, Data as of 08-Nov-18

Figure 33: Hedge Fund: Long positions rebounded with the market



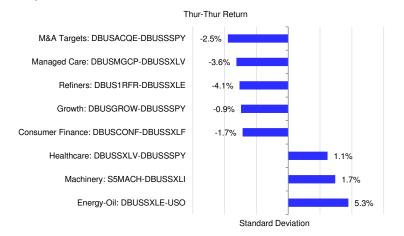
Source:Deutsche Bank Asset Allocation & Delta-1 Strategy, Axioma, Factset, Bloomberg Finance LP, Data as of 08-Nov-18

Figure 32: Europe Fast Factors: Momentum performance has picked up in comparison to other factors



Source:Deutsche Bank Quantitative & Delta-1 Strategy, Axioma, Factset, Bloomberg Finance LP, Data as of 08-Nov-18

Figure 34: M&A Targets, Managed Care, Refiners, Growth underperformed this week

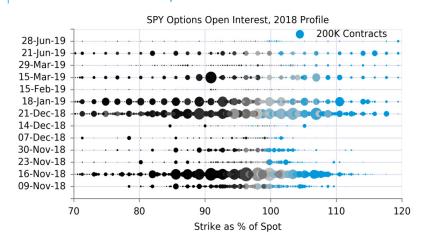


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Axioma, Factset, Bloomberg Finance LP, Data as of 7-Nov-18



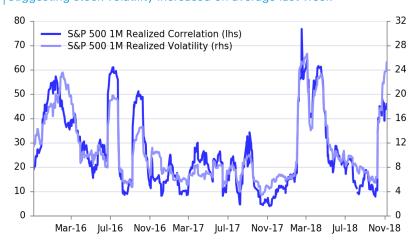
# S&P 500 Options: Open Interest, Vol, Skew, Correlation

Figure 35: SPY open interest remain concentrated at 90-110% spot with further monetization of ITM puts



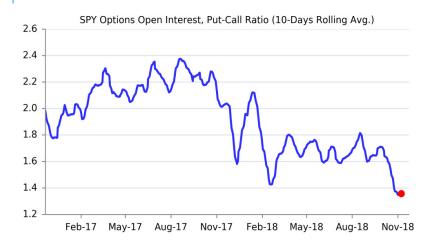
Source: Deutsche Bank Quant & Delta-1 Strategy, OptionMetrics, Bloomberg Finance LP. Data as of 08-Nov-18.

Figure 37: Realized volatility moved higher while correlation was stable, suggesting stock volatility increased on average last week



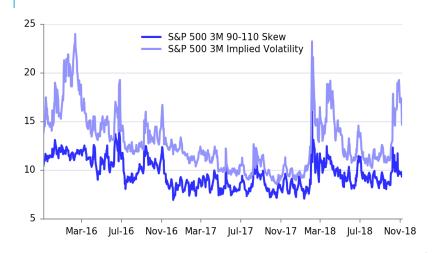
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP, Reuters. Data as of 08-Nov-18.

Figure 36: Put-call ratio currently at the lowest level since early 2017



Source: Deutsche Bank Quant & Delta-1 Strategy, OptionMetrics, Bloomberg Finance LP. Data as of 08-Nov-18.

Figure 38: Implied volatility has come down from recent highs

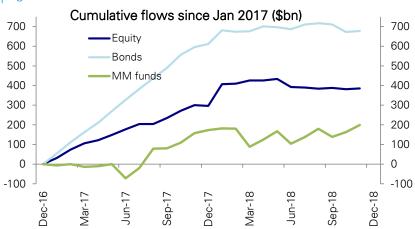


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, Bloomberg Finance LP, Reuters. Data as of 08-Nov-18.



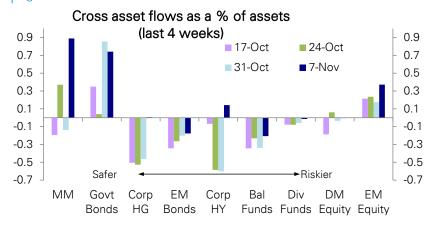
## Cross-asset flows

Figure 39: Flows across asset classes cumulative since 2017



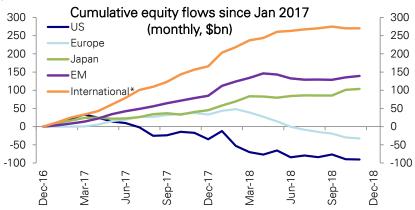
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 7-Nov-18

Figure 40: Cross asset flows last 4 weeks



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 7-Nov-18

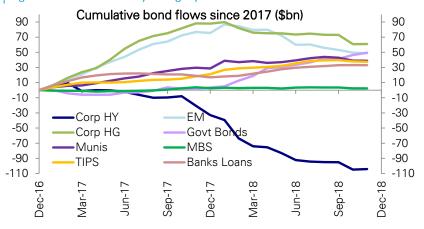
Figure 41: Equity flows across by region



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 7-Nov-18

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

Figure 42: Bond flows by category

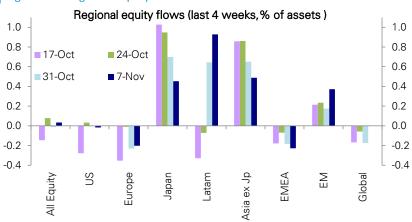


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 7-Nov-18



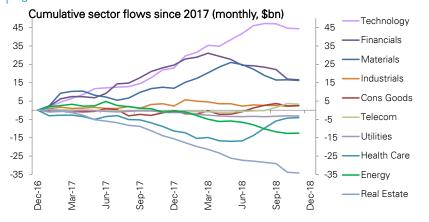
# **Equity Flows**

Figure 43: Regional equity fund flows last 4 weeks



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 7-Nov-18

Figure 44: Sector fund flows



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 7-Nov-18

Figure 45: Equity flows by fund style

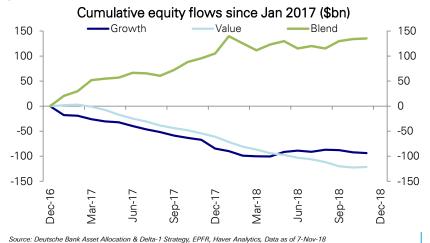
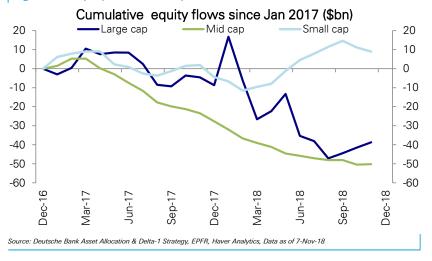


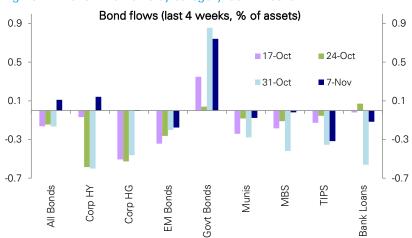
Figure 46: Equity fund flows by size





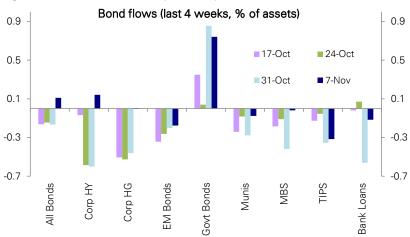
# Bond fund flows

Figure 47: Bond fund flows by category last 4 weeks



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 7-Nov-18

Figure 48: Bond fund flows by maturity

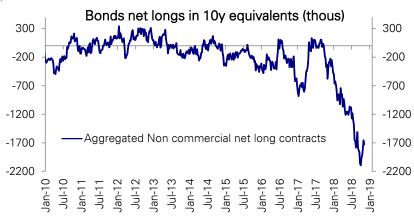


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, EPFR, Haver Analytics, Data as of 7-Nov-18



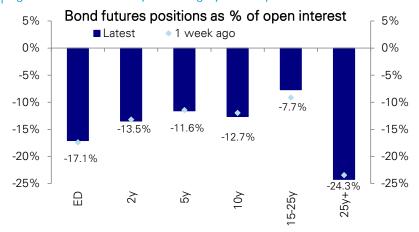
# Bond futures positioning

Figure 49: Aggregate bond futures positioning



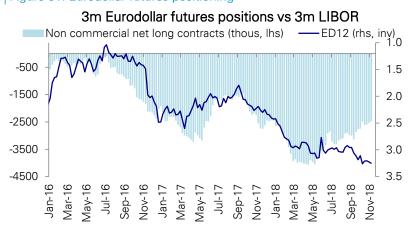
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 6-Nov-18

Figure 50: Bond futures positioning by maturity



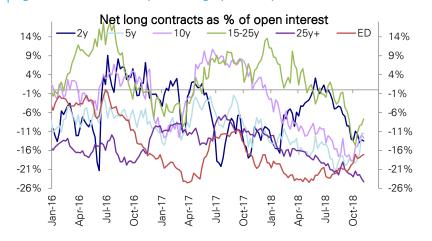
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 6-Nov-18

Figure 51: Eurodollar futures positioning



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Haver Analytics, Data as of 6-Nov-18

Figure 52: Bond futures positioning by maturity

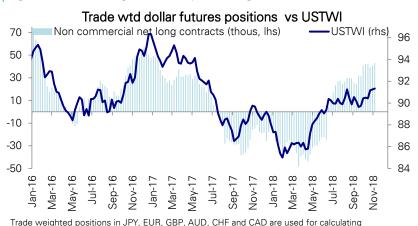


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 6-Nov-18



# FX futures positioning

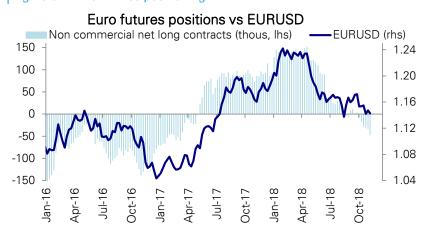
Figure 53: Trade weighted dollar positioning



That Weighted positions in 61.1, 2011, 4021, 7102, 6111 and 6712 are asset for calculate

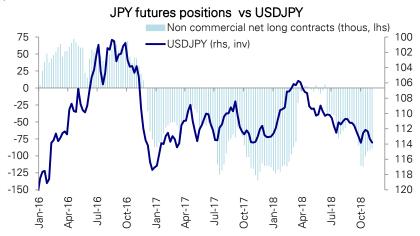
Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, FRB, Haver Analytics, Data as of 6-Nov-18

Figure 54: Euro futures positioning



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, FRB, Haver Analytics, Data as of 6-Nov-18

Figure 55: Yen futures positioning



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, FRB, Haver Analytics, Data as of 6-Nov-18

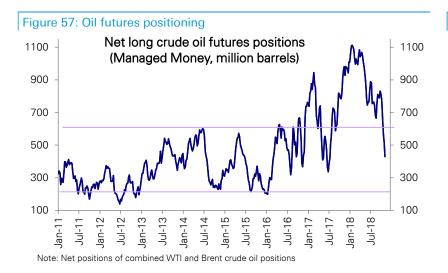
Figure 56: Futures positioning across currencies



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Haver Analytics, Data as of 6-Nov-18



# Commodity futures positioning

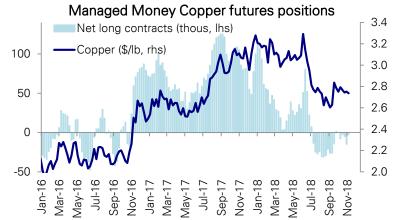


Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Haver Analytics, Data as of 6-Nov-18

#### Figure 58: 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 0 Oct-18 Jul-16 Oct-16 Jan-18 Apr-18 Jul-18 Oct-17 Jul-17

Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Haver Analytics, Data as of 6-Nov-18





Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Haver Analytics, Data as of 6-Nov-18

#### Figure 60: Gold futures positioning



Source: Deutsche Bank Asset Allocation & Delta-1 Strategy, CFTC, Bloomberg Finance LP, Haver Analytics, Data as of 6-Nov-18





# Appendix 1

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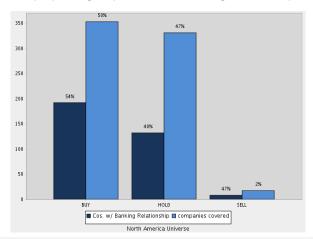
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