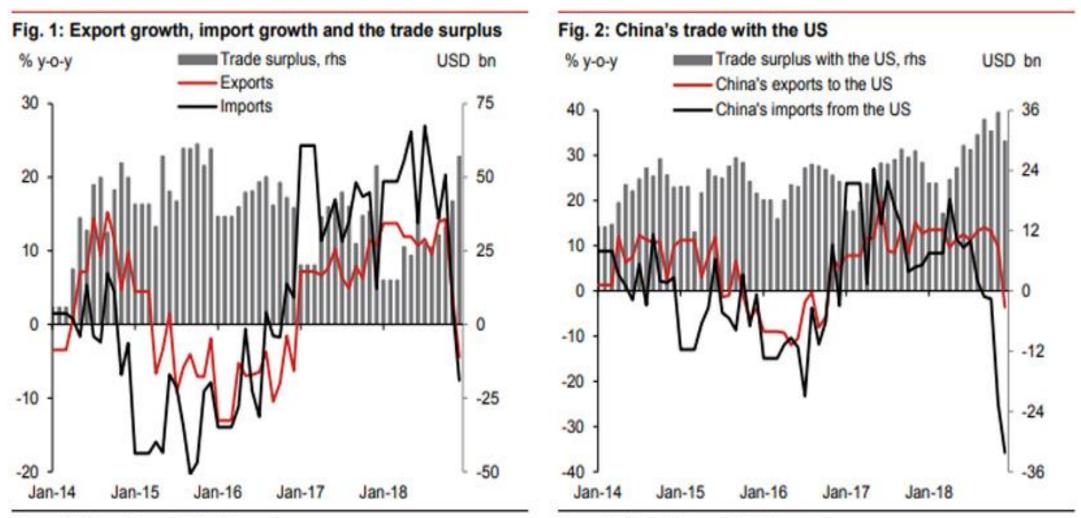


NOMURA

Charlie McElligott

Managing Director Cross-Asset Strategy Global Equity Derivatives

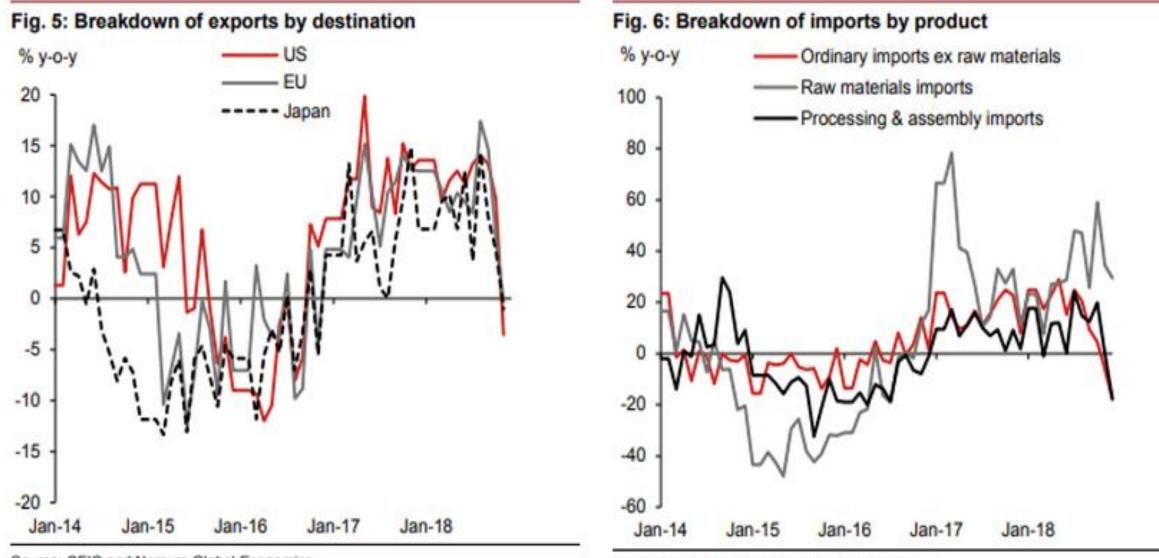
CHINA TRADE DATA COLLAPSE:



Source: WIND and Nomura Global Economics.

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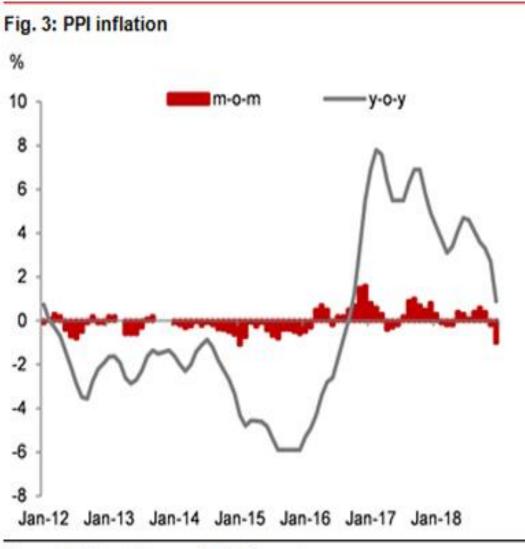
CHINA TRADE DATA COLLAPSE:



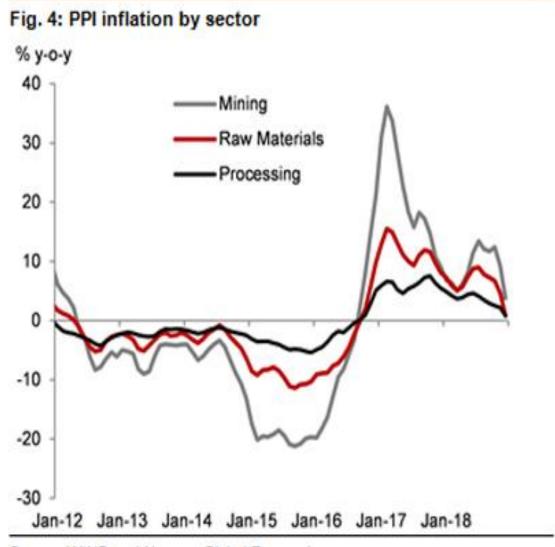
Source: CEIC and Nomura Global Economics.

Source: CEIC and Nomura Global Economics.

CHINA PLUMMETING PPI INFLATION SIGNALS WEAKER ECONOMY:



Source: WIND and Nomura Global Economics.

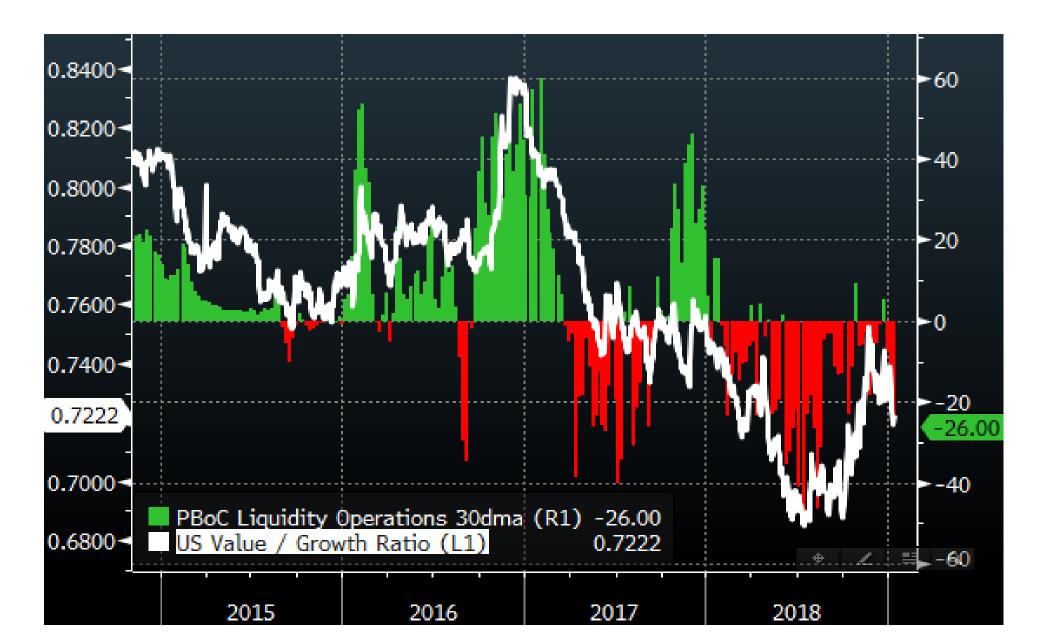


Source: WIND and Nomura Global Economics.

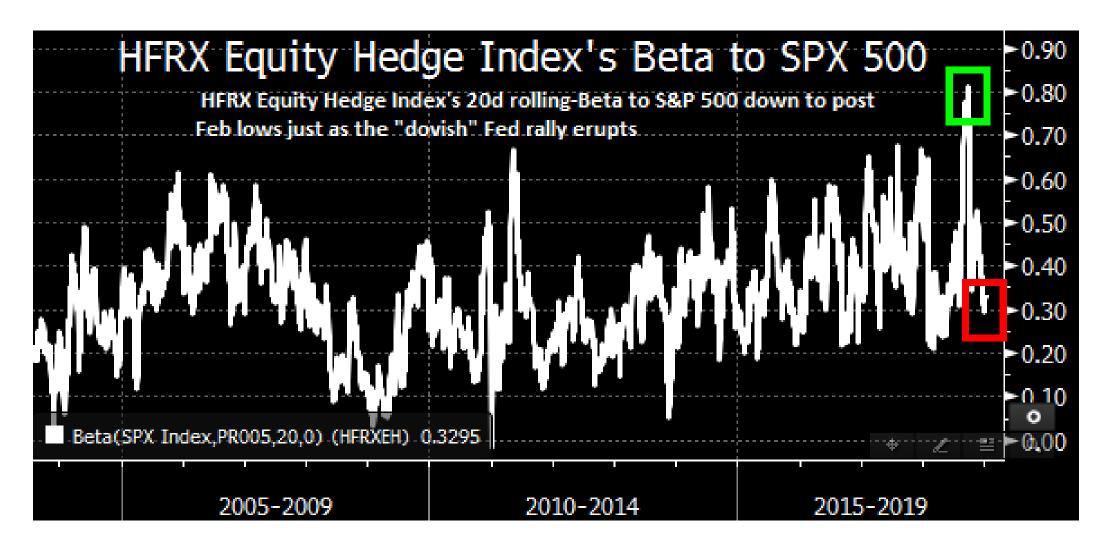
CHINA CREDIT IMPULSE UPDATE = STILL FADING:



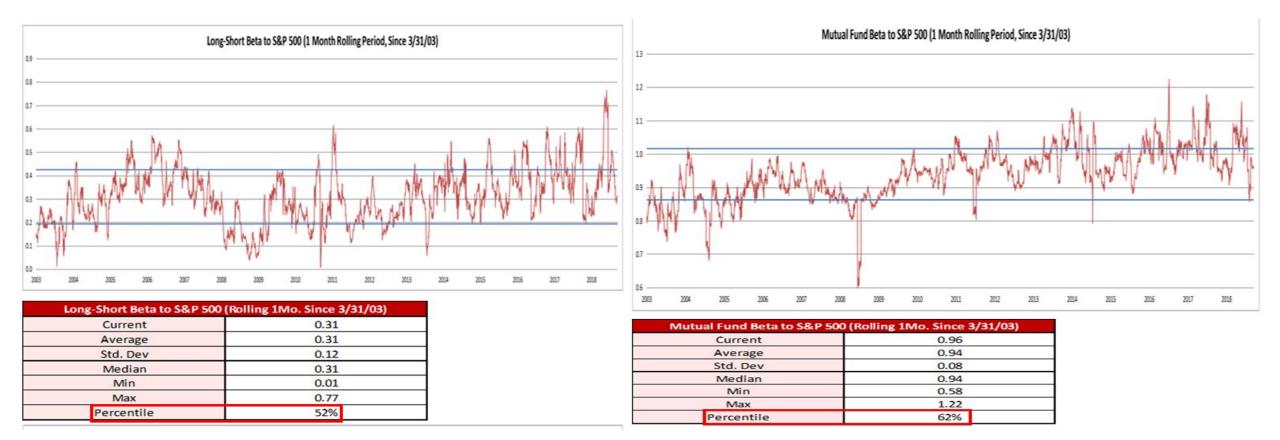
PBoC LIQUIDITY OPERATIONS (30DMA) AND US EQUITIES 'VALUE VS GROWTH' RATIO SHOWS THE IMPORTANCE OF CHINESE CREDIT IMPULSE ACROSS ASSETS:



MARKET UNDERTONES / THEMES / POSITIONING CONTINUE TO FADE THE FED'S ECONOMIC OPTIMISM & DOTS: POSITIONING--HEDGE FUND 'BETA TO SPX' REDUCED BACK NEAR 2018 'VOL EVENT' LOWS:



HEDGE- AND MUTUAL- FUND BETA TO SPX, %ILE RANK SINCE 2003:

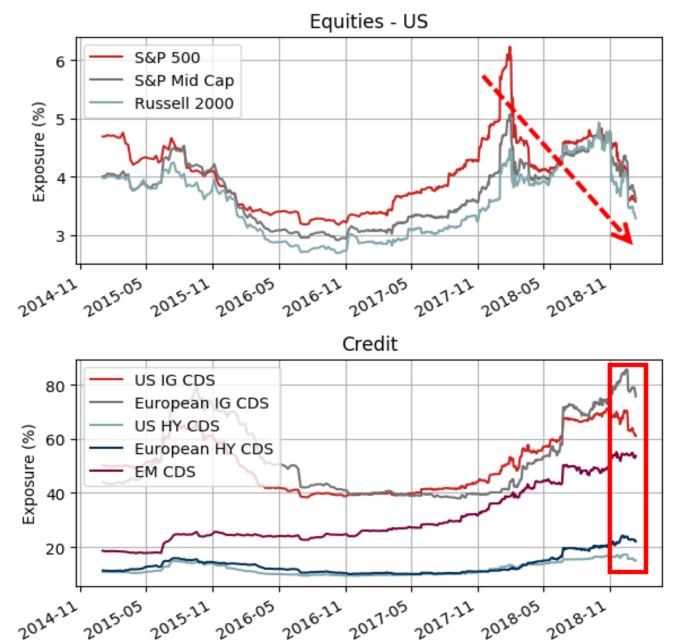


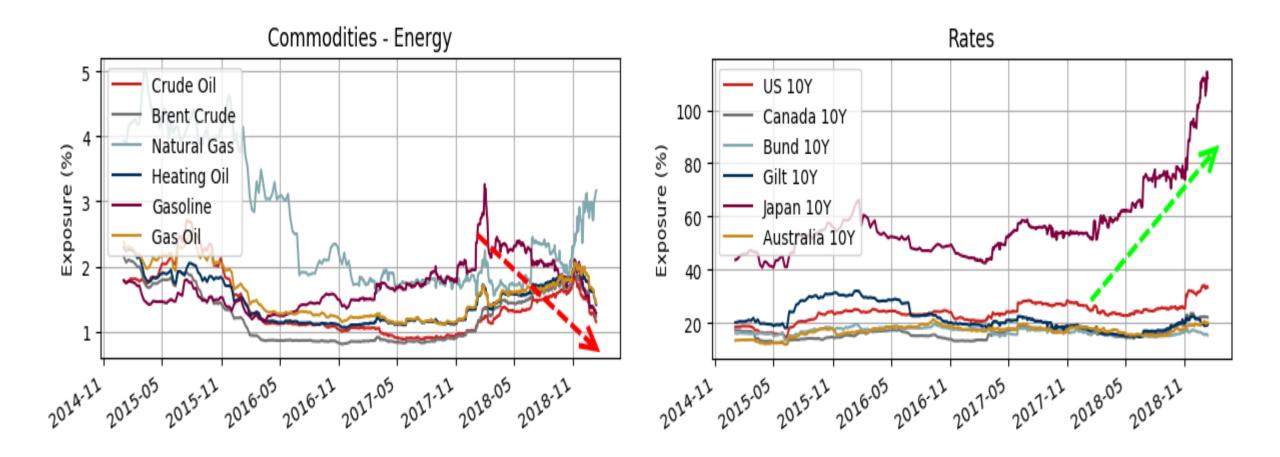
CTA MODEL POSITIONING ESTIMATES = SHORT RISK-ASSETS, LONG FIXED-INCOME & GOLD:

		Sig(Today)	Sig(1d)	Sig(1w)	Sig(1m)	
Major Markets	S&P 500	-100	-100	-100	-100	Bonds
	Euro Stoxx 50	-100	-100	-80	-100	
	Nikkei 225	-100	-100	-100	-61	
	EURUSD	-72	-71	-100	-100	
	USDJPY	-55	-48	-100	100	
	EUR_10Y	100	100	100	100	
	USD_10Y	100	100	100	-22	
	JPY 10Y	100	100	100	100	
	Brent	-100	-100	-100	-32	
	WTI	-100	-100	-100	-100	
	Gold	48	50	50	-7	
Equities	S&P 500	-100	-100	-100	-100	
	Russell 2000	-82	-100	-100	-100	
	NA SDAQ 100	-100	-100	-100	69	
	Euro Stoxx 50	-100	-100	-80	-100	
	Nikkei 225	-100	-100	-100	-61	
	DAX	-100	-100	-80	-100	
	FTSE100	-82	-80	-80	-100	
	CAC40	-100	-100	-100	-100	
	Hang Seng	-82	-80	-100	-61	
	Hang Seng CH	-100	-100	-100	-61	
	A SX SPI 200	-82	-80	-100	-100	
	KO SPI 200	-82	-80	-100	-61	
	Bovespa	100	100	100	100	

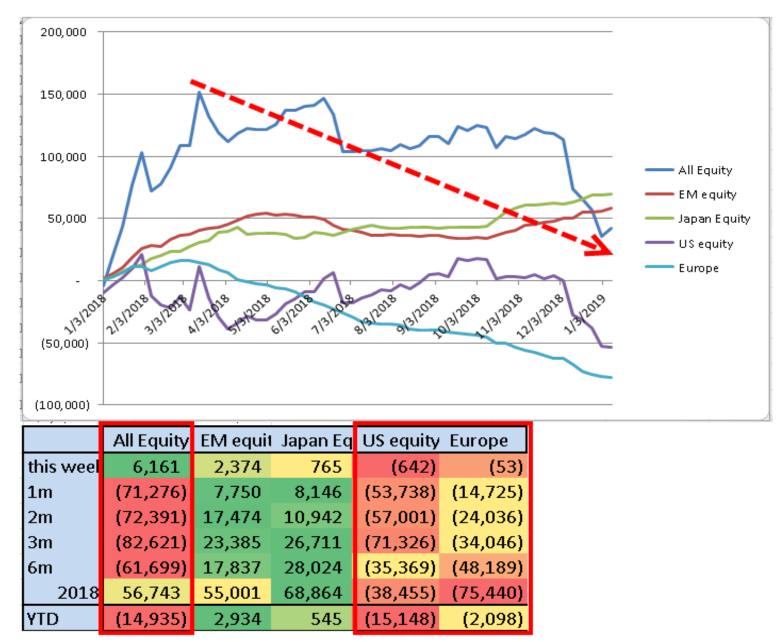
	Sig(Today)	Sig(1d)	Sig(1w)	Sig(1m)
USD_10Y	100	100	100	-22
EUR_10Y	100	100	100	100
JPY_10Y	100	100	100	100
GBP_10Y	68	70	70	100
AUD_10Y	100	100	100	100
CAD_10Y	100	100	100	100
CHF_10Y	100	100	100	100
FRA 10Y	100	100	70	100

RISK PARITY POSITIONING ESTIMATE = DELEVERAGING U.S. EQUITIES AND CREDIT, ADDING FIXED-INCOME EXPOSURE:

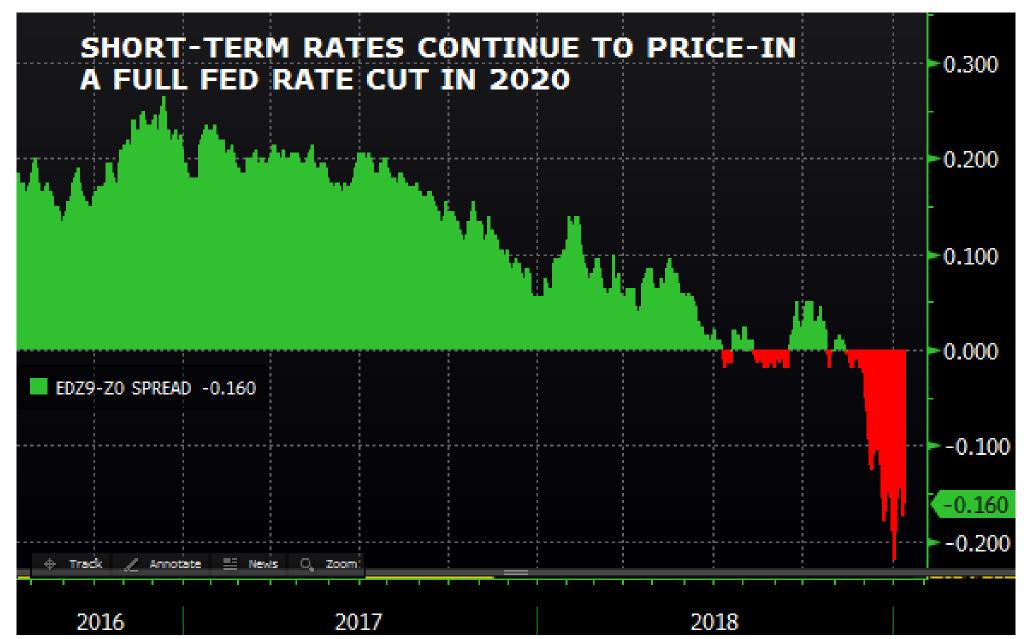




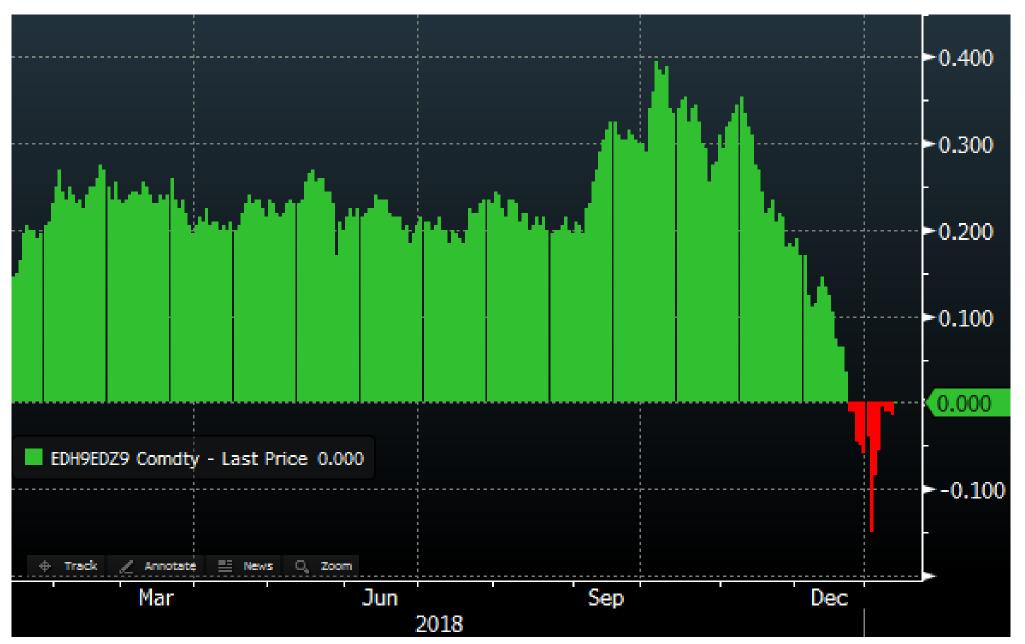
EQUITY FUND FLOWS PURGED IN 4Q18, LED BY U.S. EXODUS:



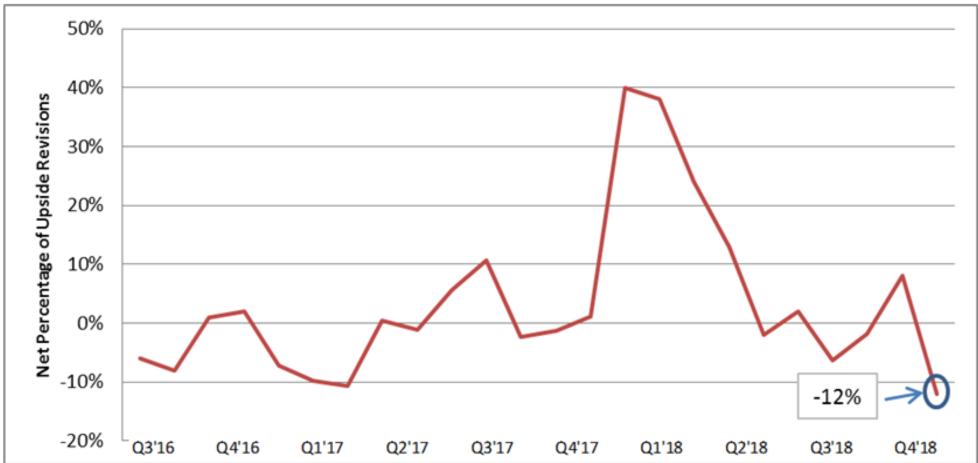
SHORT-TERM INTEREST RATES CONTINUE TO PRICE-IN A FULL FED RATE CUT IN 2020:



...WHILE ALSO PRICING-IN THE END OF THE FED CYCLE, WITH NO MORE CUTS PRICED-IN BETWEEN MARCH '19 AND DECEMBER '19:



NEGATIVE EARNINGS REVISIONS MOST EXTREME LEVELS GOING BACK 2+ YEAR:



SPX 1500 Earnings Revisions (4w EPS revision changes)

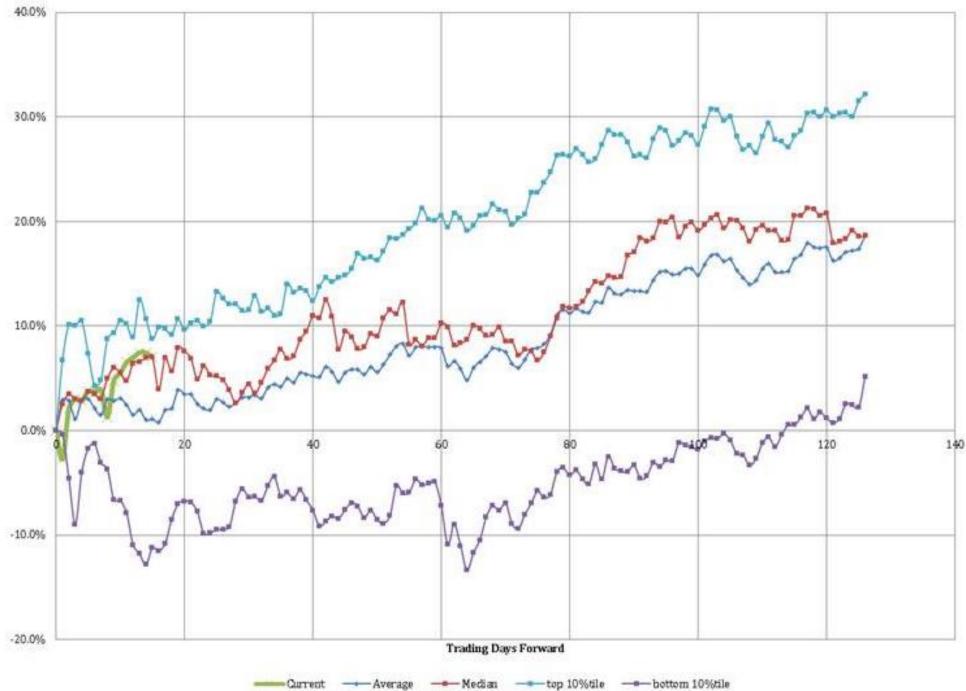
*Represents the average 4W EPS Net Revisions for all members, equally weighted, of S&P 1500 based on the net change in analyst estimate revision as % of total constituents. Source: Bloomberg

BUT NEGATIVE EARNINGS REVISIONS HAVE HISTORICALLY PRECIPITATED LARGER SPX PERFORMANCE:

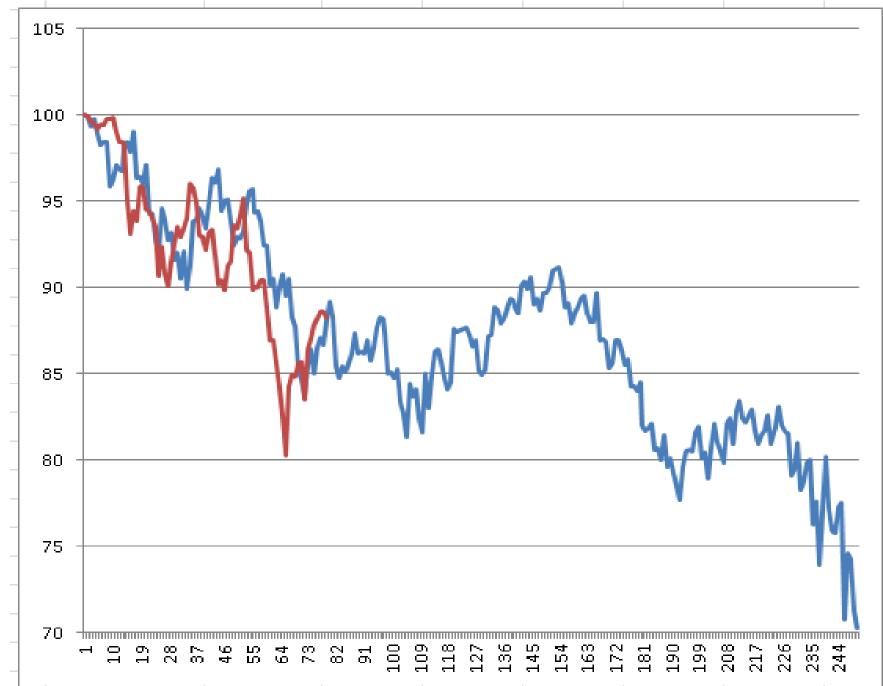
	Net Guide	SPX performance					
Date	Spread (%)	Over Earnings					
Q1 09	-41.10	4.8					
Q2 09	-1.90	12.0					
Q3 09	13.90	6.7					
Q4 09	12.70	-3.1					
Q1 10	9.90	-8.9					
Q2 10	-11.70	-0.6					
Q3 10	-7.00	4.6					
Q4 10	12.80	5.6					
Q1 11	3.50	0.4					
Q2 11	-5.80	-16.4					
Q3 11	-34.90	5.2					
Q4 11	-11.80	6.5					
Q1 12	6.80	-7.4					
Q2 12	-29.20	4.7					
Q3 12	-1.70	-6.9					
Q4 12	-10.30	3.6					
Q1 13	-6.10	7.4					
Q2 13	-10.50	1.5					
Q3 13	-1.90	6.4					
Q4 13	-3.00	0.4					
01 14	-6.70	0.7					
0214	0.50	-1.5					
Q3 14	-12.70	3.7					
Q4 14	-18.50	3.2					
01 15	-26.30	2.6					
0215	-11.80	0.3					
Q3 15	-24.30	3.7					
Q4 15	-3.50	-0.2					
01 16	-3.50	0.2					
Q2 16	-20.10	2.5					
Q3 16	-8.80	1.3					
Q4 16	-4.20	3.3					
01 17	-4.10	1.1					
Q2 17	-3.60	0.0					
Q3 17	-5.00	1.2					
Q4 17	27.20	-0.4					
Q1 18	-1.30	4.2					
Q2 18	-1.70	3.3					
Q3 18	-8.10	-5.2					
Q4 18	-26.00						
All periods	Average	1.3					
	Median	1.5					
	% Positive	74%					
Negative Earnings	Average	2.0					
Revisions	% Positive	83%					
Positive Earning	Average	-2.4					
Revisions	% Positive	17%					
4th qtr earnings	Average	2.1					
Returns	% Positive	67%					

"VIOLENT SELL-OFF FROM 52W HIGH" ANALOG TRIGGER = DOWN AT LEAST -17.5% FROM 52W HIGH OVER 67 DAY PERIOD OR LESS:

																-	-				-	and the second se						-	
Dates	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
12/21/2018	*	-2.7%	2.1%	3.0%	2.9%	3.7%	3.7%	3.9%	1.3%	4.8%	5.5%	6.5%	7.0%	7.4%	7.4%	7.0%													
8/31/1998	*	3.9%	3.5%	2.6%	1.7%	6.9%	5.1%	2.4%	5.4%	7.6%	8.4%	9.2%	6.4%	6.6%	7.0%	7.6%	11.4%	8.9%	9.1%	9.5%	9.6%	6.2%	3.0%	4.7%	3.3%	2.9%	1.4%	0.2%	2.8%
9/24/1990		1.2%	0.2%	-1.2%	0.5%	3.4%	3.5%	2.2%	2.7%	2.3%	0.2%	-1.4%	-3.0%	-1.5%	-0.4%	-1.9%	-1.9%	0.4%	2.6%	3.3%	2.6%	2.6%	1.8%	0.0%	-0.9%	-0.2%	-0.2%	0.8%	2.4%
10/19/1987		5.3%	14.9%	10.4%	10.4%	1.3%	3.7%	3.8%	8.9%	12.0%	13.7%	11.6%	10.7%	13.2%	11.4%	8.2%	6.3%	10.5%	9.3%	9.7%	8.1%	9.2%	6.8%	7.6%	8.1%	9.6%	8.6%	6.9%	2.4%
3/27/1980		2.5%	3.9%	4.0%	4.5%	4.0%	2.0%	3.0%	5.0%	6.0%	5.7%	4.7%	4.5%	3.4%	2.9%	2.4%	1.6%	5.3%	5.6%	6.3%	7.1%	7.6%	7.8%	8.2%	7.4%	7.5%	8.3%	8.2%	9.1%
7/21/1933	+	8.8%	6.9%	9.7%	10.7%	8.1%	3.1%	6.2%	8.7%	7.4%	5.0%	4.1%	7.7%	12.0%	10.2%	9.7%	8.4%	8.6%	5.7%	11.5%	9.6%	11.4%	13.2%	11.7%	12.7%	16.9%	16.7%	16.1%	15.0%
10/24/1929		1.4%	-11.7%	-20.7%	-10.7%	-6.2%	-6.2%	-11.1%	-11.1%	-20.0%	-17.0%	-17.7%	-22.9%	-27.3%	-31.4%	-25.3%	-21.2%	-22.0%	-19.6%	-17.4%	16.1%	-16.4%	-17.4%	-19.8%	-18.8%	-18.8%	-18.8%	-18.6%	-15.9%
Average		2.9%	2.8%	1.1%	2.9%	3.0%	2.1%	1.5%	3.0%	2.9%	3.1%	2.4%	1.5%	2.0%	1.0%	1.1%	0.8%	2.0%	2.1%	3.8%	3.5%	3.4%	2.5%	2.1%	2.0%	3.0%	2.7%	2.3%	2.6%
Median		2.5%	3.5%	3.0%	2.9%	3.7%	3.5%	3.0%	5.0%	6.0%	5.5%	4.7%	6.4%	6.6%	7.0%	7.0%	4.0%	7.0%	5.7%	7.9%	7.6%	6,9%	4.9%	6.2%	5.3%	5.2%	4.9%	3.8%	2.6%
%Positive		86%	86%	71%	86%	86%	86%	86%	86%	86%	86%	71%	71%	71%	71%	71%	67%	83%	83%	83%	83%	83%	83%	83%	67%	67%	67%	83%	83%
bottom 10%tile	•	-0.4%	-4.6%	-9.0%	-4.0%	-1.7%	-1.3%	-3.1%	-3.7%	-6.6%	-6.7%	-7.9%	-10.9%	-11.8%	-12.8%	-11.2%	-11.5%	-10.8%	-8.5%	-7.0%	-6.8%	-6.9%	-7.8%	-9.9%	-9.8%	-9.5%	-9.5%	-9.2%	-6.8%
top 10%tile	•	6.7%	10.1%	10.0%	10.5%	7.4%	4.3%	4.8%	8.8%	9.3%	10.5%	10.2%	8.9%	12.5%	10.6%	8.8%	9.9%	9.7%	9.2%	10.6%	9.6%	10.3%	10.5%	10.0%	10.4%	13.2%	12.6%	12.1%	12.1%



Cumulative SPX returns from the SPX being down at least -17.5% over 67 day time period



SPX cumulative return from Oct9th 2007 to Oct3rd 2008 and Sep20 2018 to Jan14 2009

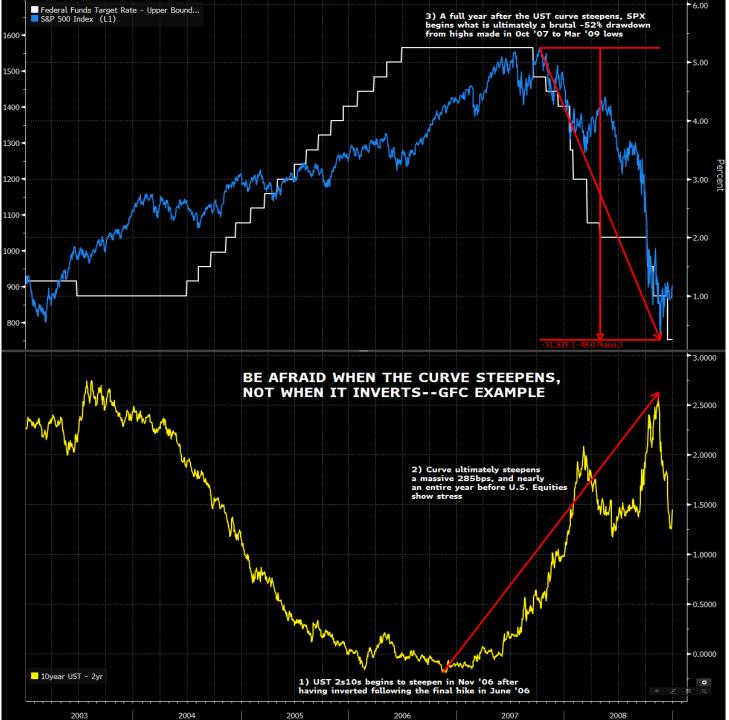
CURVE UPDATES—HAS THE FED 'DOVISH PIVOT' DONE ENOUGH TO OFFSET 'POLICY ERROR' / 'TIGHTENING INTO A SLOWDOWN' CONCERNS? SHORT TERM CURVES-



UST CURVES-



WORRY WHEN WE STEEPEN:





STEEPENING CURVE IS WHY EQUITIES 'VALUE' BEGINS TO WORK AGAIN RELATIVE TO 'GROWTH' – 2S30S AND VALUE / GROWTH RATIO SINCE 2009:



VALUE / GROWTH AND 2S10S CURVE SINCE START 2017:

