

THE
MACRO
SHOW

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1

#OVERSOLD



2

BOND
PROXIES



3

GDP



1 #OVERSOLD

Shorting the U.S. stock market into yesterday's immediate-term #oversold signals @Hedgeye is not how you make money in *Quad4* – covering shorts so that you can re-load on bounces to lower-highs within *Bearish @Hedgeye TRENDS* is. Now that the Russell 2000 and NASDAQ have lost -15.6% and -12.4% of their value since the end of AUG.

2 BOND PROXIES

On corrections that's where you want to keep buying against your *Momentum, High Beta, and Tech* shorts. Yesterday's longs that worked (i.e. things that were up on the day in a sea of bloody red) were playbook *Quad 4 Longs* like the U.S. Dollar, Treasuries (short and long term), Utilities (XLU), Consumer Staples (XLP) and REITS (XLRE).

3 GDP

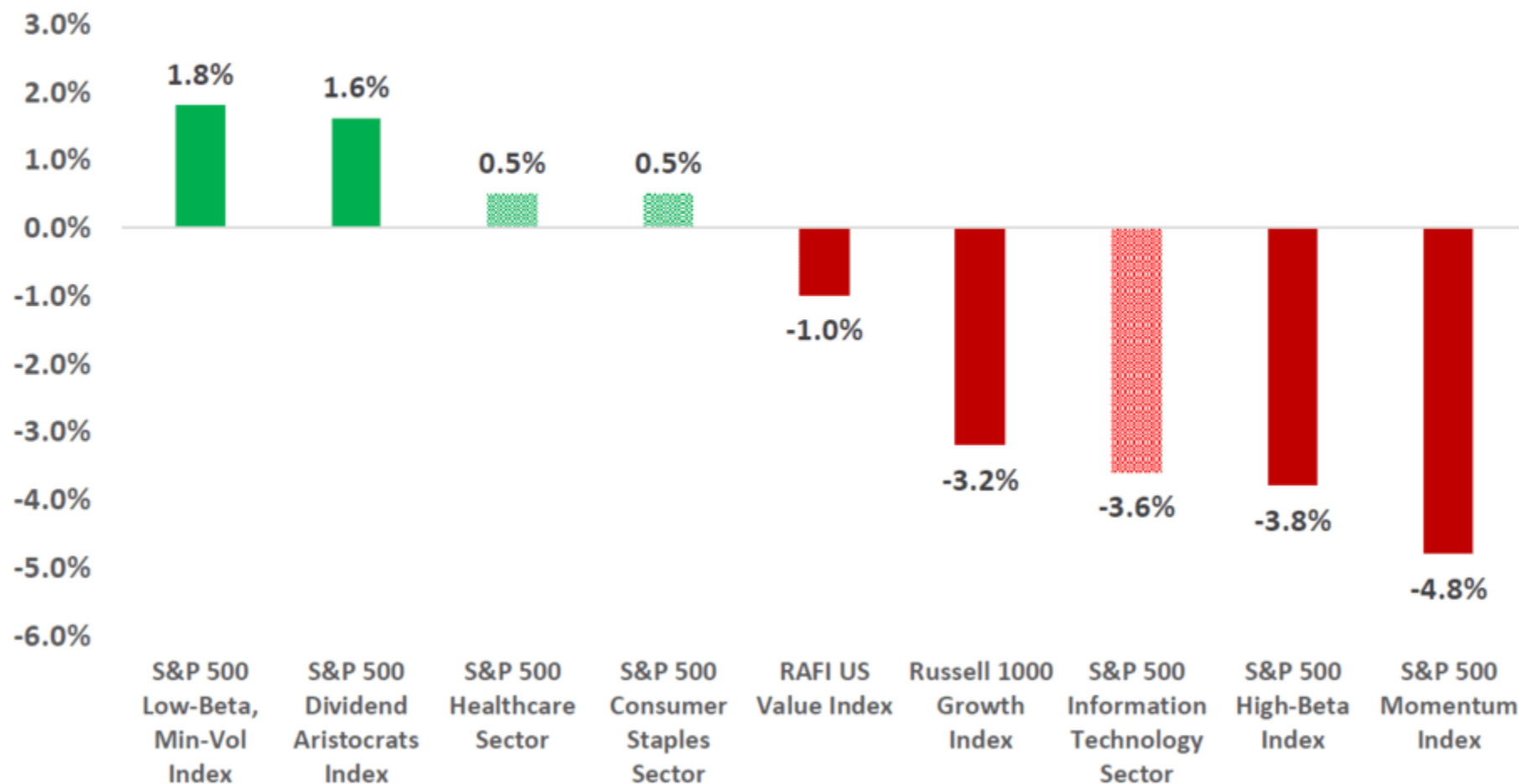
Need a positive catalyst for *Macro Tourists* who are begging for one at this point? We're at +3.49% for the Q3 headline U.S. GDP print tomorrow morning. Yesterday's news? Yes. But this will be a reminder of why people should have been long U.S. Growth (and short Treasuries) while the U.S. economy was at *#PeakCycle* and in *Quad 2* (i.e. in Q3).

MACRO GRIND

Q: Why Are We Talking About Style Factor Returns in Quad 4?

A: PLAYING QUAD 4 WITH STYLE FACTOR CONSTRUCTIONS HAS HISTORICALLY CREATED HIGHER DISPERSION RETURN STREAMS THAN PICKING WINNERS AND LOSERS BY SECTOR.

Expected Value In #Quad4



Historically, the most divergent QUAD 4 returns at the sector level have come in the following:

Staples: +0.5%
Healthcare: +0.5%
Info Tech: -3.6%

However “Style-Factor” return capture has historically been even more powerful during historical instances of Quad 4:

Low-Beta, Min-Vol: +1.8%
Dividend Yield: +1.6%
High-Beta: -3.8%
Momentum: -4.8%

2-Year U.S. Treasury Yield Index



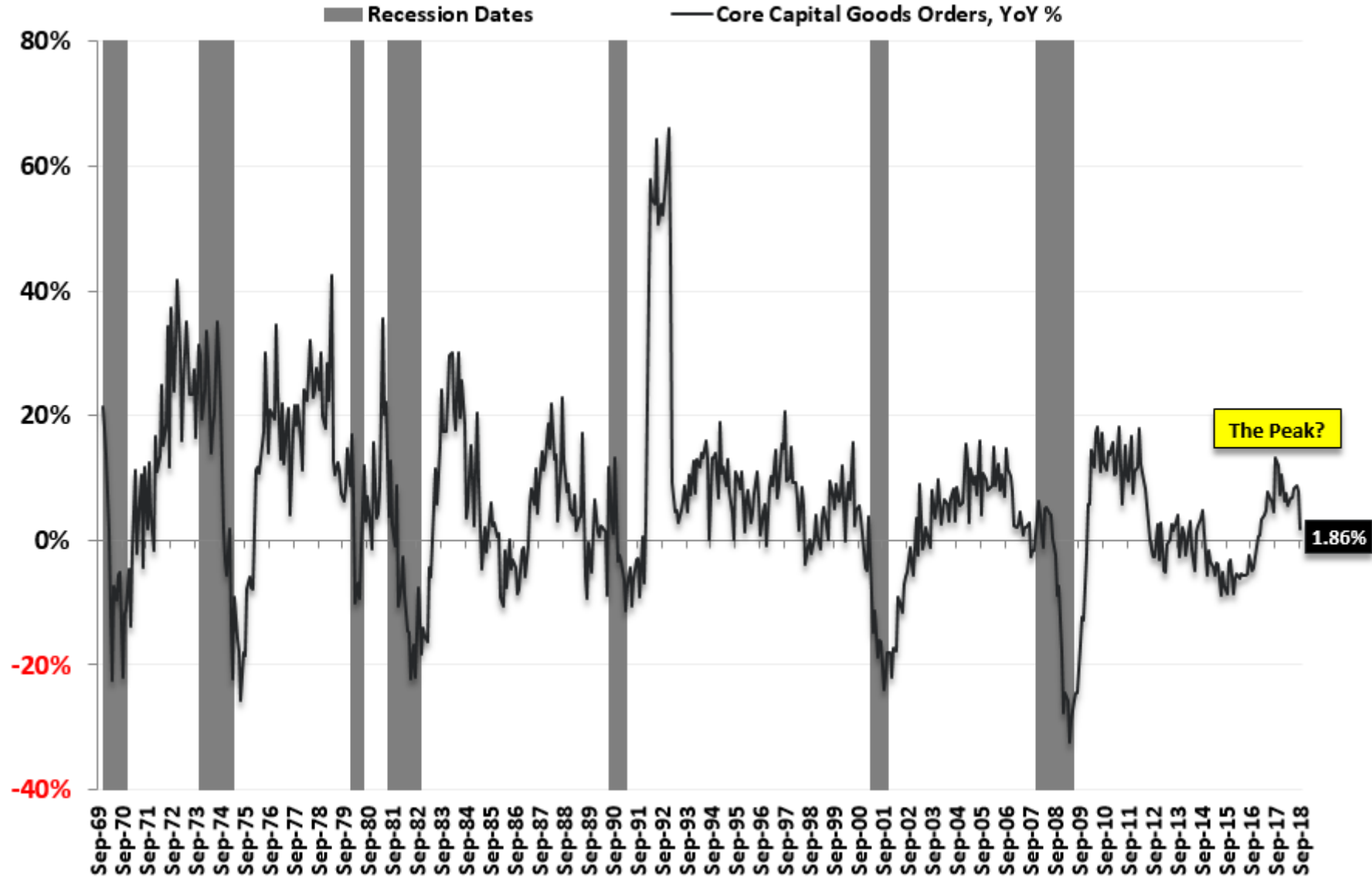
South Korea Seoul Composite



Tokyo Nikkei 225 Average

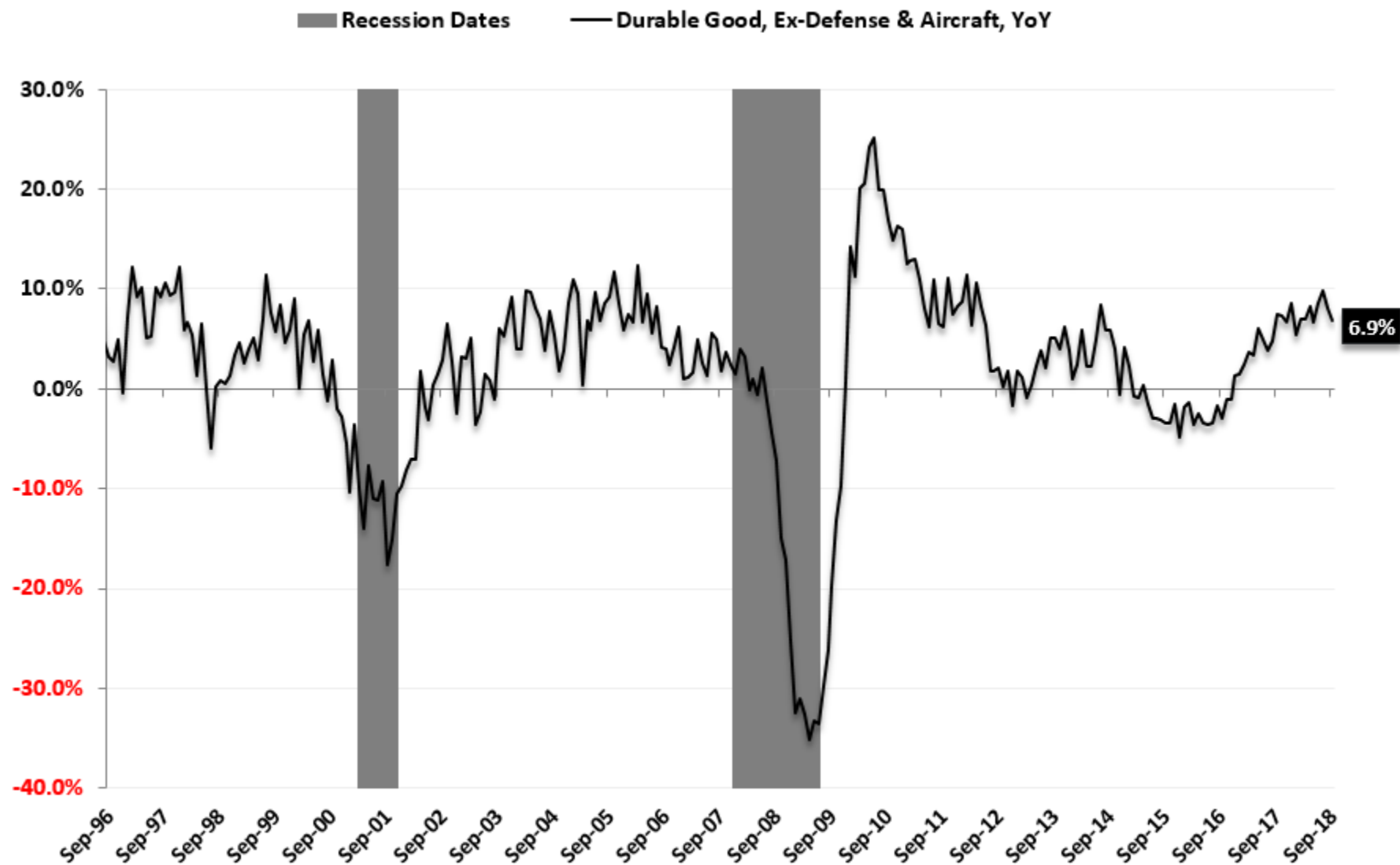


Capital Goods Orders



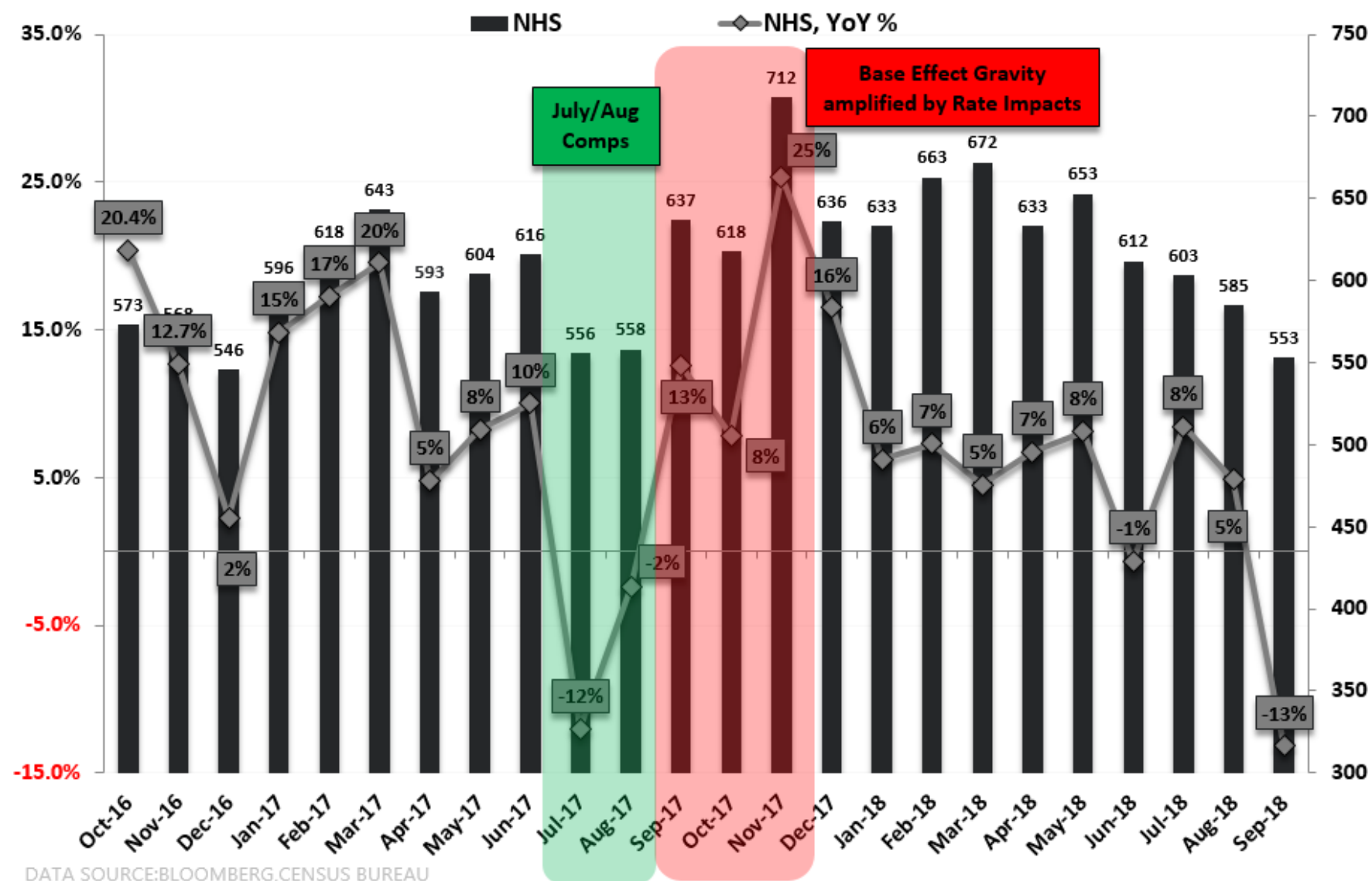
DATA SOURCE: BLOOMBERG, CENSUS BUREAU, HRM

Durable Goods



DATA SOURCE: BLOOMBERG, NBER, CENSUS BUREAU, HRM

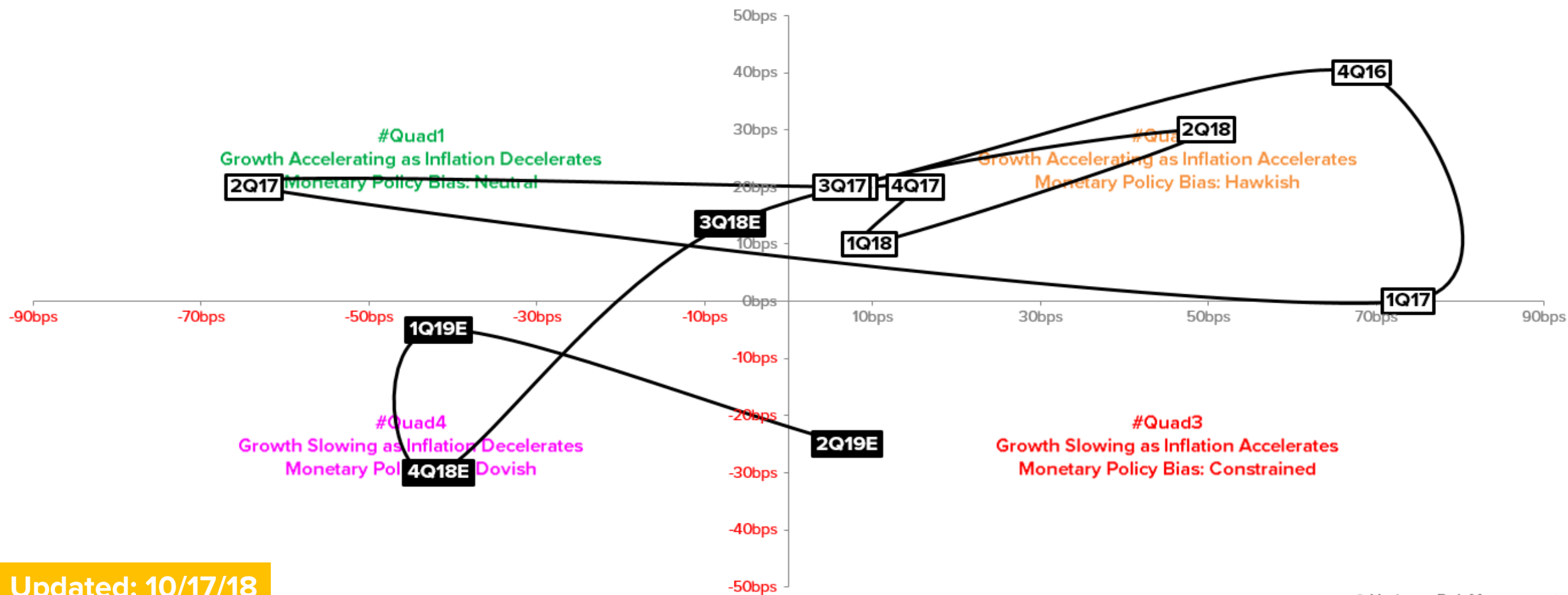
New Home Sales



United States	3Q15	4Q15	1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18		3Q18E	4Q18E	1Q19E	2Q19E	NTM
Real GDP QoQ SAAR	1.00%	0.40%	1.50%	2.30%	1.90%	1.80%	1.80%	3.00%	2.80%	2.30%	2.20%	4.20%	Hedgeye Estimates	3.44%	1.10%	2.00%	3.11%	-
Percentile (T10Y)	36%	21%	41%	59%	46%	46%	44%	69%	64%	59%	56%	90%	Bloomberg Consensus Estimates	3.20%	2.76%	2.40%	2.49%	-
Real GDP YoY	2.40%	2.00%	1.60%	1.30%	1.50%	1.90%	1.90%	2.10%	2.30%	2.50%	2.60%	2.90%	Hedgeye Estimates	3.04%	2.74%	2.69%	2.44%	2.72%
Percentile (T10Y)	56%	51%	33%	23%	28%	54%	51%	64%	67%	72%	74%	90%	Bloomberg Consensus Estimates	2.99%	3.06%	3.10%	2.70%	2.96%
Headline CPI YoY	0.11%	0.47%	1.08%	1.05%	1.12%	1.80%	2.54%	1.90%	1.97%	2.12%	2.21%	2.71%	Hedgeye Estimates	2.64%	2.22%	1.81%	1.88%	2.14%
Percentile (T10Y)	13%	15%	18%	18%	23%	59%	77%	67%	69%	74%	79%	87%	Bloomberg Consensus Estimates	2.65%	2.50%	2.36%	2.44%	2.49%

United States

◆ x-axis: Second Derivative of YoY Headline CPI;
y-axis: Second Derivative of YoY Real GDP



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U.S. Index Revenue & Earnings Comps

Q3 2018 QTD S&P 500	SALES GROWTH (YY%)	EARNINGS GROWTH (YY%)	#REPORTED
S&P 500 (Aggte.)	8.0%	23.3%	160 / 500
Energy	2.7%	14.7%	4 / 30
Materials	15.3%	38.2%	4 / 24
Industrials	9.0%	26.2%	33 / 71
Consumer Discretionary	6.9%	6.0%	16 / 64
Consumer Staples	5.1%	6.4%	10 / 32
Healthcare	13.3%	16.3%	19 / 63
Financials	5.3%	27.2%	39 / 67
Information Technology	9.4%	27.6%	23 / 66
Communication Services	10.0%	37.7%	5 / 22
Utilities	-8.1%	25.1%	2 / 29
Real Estate	12.4%	17.0%	5 / 32

Nasdaq 100	SALES GROWTH (YY%)	EARNINGS GROWTH (YY%)	#REPORTED
Nasdaq (Aggte.)	13.0%	36.3%	31 / 100
Industrials	13.9%	58.5%	5 / 7
Consumer Discretionary	52.9%	1752.8%	3 / 16
Consumer Staples	6.4%	7.2%	3 / 6
Healthcare	17.7%	22.5%	6 / 20
Information Technology	17.4%	37.3%	12 / 35
Communication Services	25.3%	71.6%	2 / 12

U.S. Index Revenue & Earnings Comps

Dow Jones	SALES GROWTH (YY%)	EARNINGS GROWTH (YY%)	#REPORTED
Dow Jones (Aggte.)	7.6%	21.9%	18 / 30
Energy	0.0%	0.0%	0 / 2
Industrials	0.0%	0.0%	0 / 1
Consumer Discretionary	6.7%	22.4%	4 / 4
Consumer Staples	3.3%	14.5%	2 / 3
Health Care	7.1%	1.2%	2 / 4
Financials	9.9%	14.2%	2 / 4
Information Technology	8.1%	29.9%	4 / 4
Communication Services	9.7%	27.7%	3 / 6

Russell 2000	SALES GROWTH (YY%)	EARNINGS GROWTH (YY%)	#REPORTED
Russell 2000 (Aggregate)	7.2%	35.9%	325 / 2011
Energy	21.6%	146.1%	7 / 123
Materials	12.9%	64.9%	16 / 74
Industrials	12.7%	32.5%	42 / 265
Consumer Discretionary	7.1%	0.7%	27 / 225
Consumer Staples	-24.9%	339.5%	6 / 55
Healthcare	6.1%	-47.2%	11 / 367
Financials	11.4%	38.0%	182 / 401
Information Technology	13.5%	35.4%	16 / 223
Communication Services	6.6%	-18.0%	4 / 64
Utilities	-9.7%	-18.5%	1 / 36
Real Estate	5.7%	5.1%	11 / 112

Sector Performance

<u>SECTOR</u>	<u>Ticker</u>	<u>Price</u>	<u>1-Day % Chg</u>	<u>MTD % Chg</u>	<u>YTD % Chg</u>
Consumer Discretionary	XLY	\$103.60	-2.99%	-11.62%	4.98%
Financial Select Sector	XLF	\$25.24	-2.51%	-8.48%	-9.57%
Health Care Select Sector	XLV	\$87.29	-3.30%	-8.26%	5.58%
Technology Select Sector	XLK	\$67.17	-4.48%	-10.83%	5.04%
Consumer Staples Select Sector	XLP	\$54.75	0.42%	1.52%	-3.76%
Industrial Select Sector	XLI	\$69.30	-3.39%	-11.61%	-8.42%
Materials Select Sector	XLB	\$50.51	-3.16%	-12.81%	-16.55%
The Energy Select Sector	XLE	\$66.17	-3.95%	-12.64%	-8.43%
Utilities Select Sector	XLU	\$55.23	2.43%	4.90%	4.84%
Real Estate Select Sector	XLRE	\$31.94	1.17%	-2.05%	-3.04%
Communications Services Sector	XLC	\$44.37	-4.76%	-9.45%	
S&P 500	SPX	2,656.10	-3.09%	-8.85%	-0.65%

Sector Relative Performance

	<u>Ticker</u>	<u>Price</u>	<u>1-Day %</u> <u>Chg</u>	<u>MTD %</u> <u>Chg</u>	<u>YTD %</u> <u>Chg</u>
Consumer Discretionary	XLY	\$103.60	0.10%	-2.77%	5.63%
Financial Select Sector	XLF	\$25.24	0.58%	0.37%	-8.91%
Health Care Select Sector	XLV	\$87.29	-0.21%	0.59%	6.23%
Technology Select Sector	XLK	\$67.17	-1.39%	-1.98%	5.69%
Consumer Staples Select Sector	XLP	\$54.75	3.51%	10.37%	-3.11%
Industrial Select Sector	XLI	\$69.30	-0.30%	-2.76%	-7.76%
Materials Select Sector	XLB	\$50.51	-0.08%	-3.96%	-15.90%
The Energy Select Sector	XLE	\$66.17	-0.86%	-3.79%	-7.77%
Utilities Select Sector	XLU	\$55.23	5.52%	13.75%	5.50%
Real Estate Select Sector	XLRE	\$31.94	4.26%	6.80%	-2.38%
Communications Services Sector	XLC	\$44.37	-1.68%	-0.60%	

Market Share Volume & Total Value Traded

<u>INDEX/SECURITY</u>	VOLUME: (10/24) vs.			
	<u>Prior Day</u>	<u>1M Ave</u>	<u>3M ave</u>	<u>1Y Ave</u>
Total Market Volume*	-10%	8%	22%	-4%
Total Exchange Volume**	6%	22%	38%	39%

*Total Market Volume = Total US exchange volume plus OTC and OTCBB trading volume for all security types. Calculated by Bloomberg.

**Tape A+B+C volume = total US exchange volume

*** Total Traded Value for Russell 3000 (total mkt proxy)

Style Factor Performance

	FACTOR	1D % Chg	1W % Chg	1M % Chg	3M % Chg	6M % Chg	YTD % Chg
Debt	High Debt/EV	-1.9%	-4.3%	-7.3%	-5.1%	-3.4%	-7.8%
	Low Debt/EV	-3.5%	-6.6%	-11.4%	-8.9%	0.0%	2.5%
SI	High Short Interest	-2.4%	-5.0%	-9.7%	-7.9%	-3.4%	-5.1%
	Low Short Interest	-2.7%	-5.4%	-9.7%	-6.1%	-0.8%	0.0%
BETA	High Beta	-4.4%	-8.6%	-15.5%	-13.0%	-9.8%	-9.8%
	Low Beta	-0.3%	-1.0%	-2.0%	0.3%	5.1%	0.6%
YIELD	High Yield	-1.3%	-3.1%	-6.6%	-5.7%	-3.2%	-9.0%
	Low Yield	-4.2%	-7.9%	-12.3%	-9.3%	0.0%	4.1%
MKT CAP	MCAP Bottom 25%	-2.5%	-5.6%	-11.2%	-10.5%	-7.9%	-10.8%
	MCAP Top 25%	-2.9%	-5.3%	-8.2%	-4.1%	2.6%	2.3%
Sales	Top 25% Sales Growth	-4.1%	-7.8%	-12.3%	-11.0%	-3.1%	1.5%
	Bottom 25% Sales Growth	-2.1%	-3.8%	-7.2%	-6.0%	-2.4%	-7.8%
EPS	Top 25% EPS Growth	-3.8%	-7.5%	-11.9%	-8.6%	-2.4%	-0.7%
	Bottom 25% EPS Growth	-1.6%	-3.4%	-6.8%	-5.7%	-3.4%	-7.7%

**Mean Performance of Top Quartile vs. Bottom Quartile, S&P500 Companies*

Rates & Spreads

		1D	5D	1M	3M	vs. 52-Wk, Bps		vs.	vs.
	Price	Bps Chg	Bps Chg	Bps Chg	Bps Chg	High	Low	3Y Ave	5Y Ave
3M T-Bill	2.33%	0.2	2.1	16	34	-1	123	140	176
3M LIBOR	2.49%	0.0	4.0	12	16	0	112	119	161
2Y T-Note	2.83%	-4.4	-5.4	2	20	-8	127	137	175
5Y T-Note	2.94%	-6.9	-11.5	-2	12	-15	97	102	117
10Y T-Note	3.11%	-5.9	-9.6	2	16	-15	81	80	77
30Y T-Note	3.34%	-3.2	-3.7	11	26	-11	66	48	36
2Y-10Y Spread, Bps	27	-1.4	-4.2	0.3	-4	-7	-47	-57	-98
IG SPREAD (AAABBB)	1.51%	0.0	3.0	4	-2	-13	31	-8	-9
HIGH YIELD	6.27%	0.0	16.4	34	18	-6	92	-16	-5
5Y BREAK EVEN	1.93%	-2.2	-7.9	-10.6	-7.6	-26.1	16.3	21.0	23.3

Key \$USD Correlations

52-Wk Rolling 30D Correlation

METRIC	15D	30D	90D	120D	180D	High	Low	% Time Pos	% Time Neg
SPX	-0.14	-0.58	-0.03	0.34	0.67	0.73	-0.93	36%	64%
BRENT Oil	-0.44	0.01	-0.31	-0.09	0.64	0.84	-0.91	27%	73%
CRB Index	-0.67	0.47	-0.38	-0.09	-0.60	0.67	-0.94	44%	56%
GOLD	0.02	0.37	-0.45	-0.72	-0.88	0.37	-0.97	2%	98%

*Days = Trading Days

CFTC Non-Commercial Net Long Positioning

CFTC NON-COMMERCIAL NET LONG POSITIONING

HEDGEYE TV

The Macro Show
October 25, 2018

	METRIC	Latest	W/W Chg	3M Ave	6M Ave	1Y Ave	3Y		Z-Score	
							Max	Min	1Y	3Y
EQUITIES	SPX (Index + E-mini)	209,584	(35,148)	167,371	168,907	155,117	249,638	(248,441)	1.29X	1.25X
	VIX	(33,037)	80,566	(111,097)	(69,328)	(51,752)	92,913	(174,665)	0.24X	0.60X
	Russell 2000 (mini)	(76,263)	(30,686)	(4,255)	23,636	8,417	93,772	(79,684)	-2.40X	-1.73X
	Dow Jones (mini)	25,984	(18,931)	34,533	22,977	37,331	95,976	(999)	-0.43X	-0.69X
	Nasdaq (mini)	1,563	(10,764)	31,964	19,511	15,864	163,838	(24,647)	-0.82X	-1.18X
	Nikkei Index	(9,128)	(152)	(6,238)	(1,438)	2,018	14,253	(9,128)	-1.54X	-2.67X
RATES	10Y UST	(638,779)	8,876	(622,516)	(478,570)	(300,961)	372,991	(758,490)	-1.38X	-2.16X
	2Y UST	(267,019)	(13,445)	(179,192)	(93,389)	(138,767)	104,027	(310,549)	-1.25X	-1.81X
	5Y UST	(843,601)	22,539	(813,740)	(689,528)	(554,718)	(33,993)	(866,140)	-1.63X	-2.52X
	UST Bonds	(118,924)	23,886	(65,054)	(34,930)	13,063	122,839	(142,810)	-2.10X	-2.88X
	30D Fed Funds	(30,038)	(17,188)	15,541	71,961	27,767	219,071	(286,025)	-0.59X	0.20X
	Eurodollar	(2,069,517)	2,733	(2,441,959)	(2,574,506)	(2,545,919)	388,202	(3,110,209)	1.59X	-0.51X
CURRENCIES	USD	37,905	159	33,878	20,997	9,393	56,635	(10,666)	1.80X	0.84X
	JPY	(102,823)	14,908	(76,185)	(47,617)	(70,788)	70,342	(140,151)	-0.67X	-1.12X
	EUR	(27,335)	(8,608)	2,376	35,824	76,256	147,318	(172,030)	-1.89X	-0.26X
	GBP	(44,044)	9,559	(59,946)	(31,193)	(6,333)	49,216	(113,271)	-1.03X	-0.21X
	AUD	(72,205)	1,976	(58,508)	(41,431)	(12,523)	77,969	(74,181)	-1.66X	-2.25X
	CAD	(9,761)	1,532	(25,339)	(26,881)	(877)	78,001	(99,736)	-0.26X	-0.11X
	MXN	68,488	(5,936)	37,843	32,776	53,573	117,131	(89,524)	0.44X	0.96X
	NZD	(35,412)	(1,592)	(27,656)	(15,544)	(8,555)	35,981	(35,412)	-1.59X	-2.36X
COMMODITIES	CHF	(15,875)	(3,686)	(32,732)	(33,803)	(26,067)	10,064	(47,216)	0.80X	-0.22X
	CRUDE OIL	509,991	(28,791)	589,006	635,216	663,244	784,290	195,086	-2.06X	0.19X
	GOLD	(37,372)	65,637	(67,107)	(15,293)	73,349	286,921	(103,009)	-1.09X	-1.58X
	COPPER	8,141	916	3,251	19,473	30,743	67,602	(44,710)	-1.13X	-0.20X
	Natural Gas	(6,071)	(15)	(67,635)	(75,744)	(89,383)	57,455	(219,264)	2.16X	1.32X
	RBOB Gasoline	101,424	(9,777)	106,837	101,421	91,998	114,862	29,519	0.79X	1.50X
	ULSD Heating Oil	43,952	(4,378)	41,939	40,930	42,024	67,696	(23,640)	0.13X	0.81X
	Silver	(15,448)	7,510	(13,864)	1,776	11,377	107,003	(30,158)	-1.00X	-1.76X
	Platinum	14,551	5,340	(2,901)	(412)	14,205	56,853	(11,540)	0.02X	-0.64X
	Aluminum	163,475	(2,043)	159,128	161,735	157,727	168,292	122,356	0.55X	1.31X
	Nickel	42,230	(365)	42,658	44,005	37,006	47,708	13,508	0.60X	1.21X
	Corn	83,833	63,341	10,121	101,398	61,276	373,443	(166,835)	0.13X	0.32X
	Soybeans	(26,904)	15,931	(51,917)	10,983	38,816	255,950	(113,144)	-0.66X	-0.86X
	Wheat	(5,506)	2,451	26,422	17,338	(24,785)	63,219	(143,292)	0.37X	1.07X
	Live Cattle	97,419	(634)	83,188	56,492	83,871	164,117	(695)	0.33X	0.39X
	Lean Hogs	29,044	587	11,721	3,856	24,849	90,653	(11,151)	0.14X	-0.42X
	Sugar	19,761	45,498	(75,506)	(53,599)	(55,325)	351,383	(131,628)	1.43X	-0.47X
	Cotton	55,213	(1,204)	81,694	95,851	94,114	132,318	(28,816)	-1.92X	-0.60X
	Coffee	(55,855)	20,383	(89,666)	(69,428)	(56,182)	67,942	(106,651)	0.01X	-1.09X
	Cocoa	(25,007)	3,971	(807)	24,772	21,270	70,034	(43,846)	-1.85X	-1.27X
	Orange Juice	(3,439)	(546)	1,127	2,453	764	10,123	(4,916)	-1.34X	-1.48X

Euro-Area Economic Data

COUNTRY	Event	MONTH	SURVEY	ACTUAL	PRIOR	REVISED
Finland	Retail Sales Volume YoY	Sep P	--	-1.00%	1.60%	--
Spain	PPI YoY	Sep	--	5.20%	5.20%	5.10%
Sweden	Consumer Confidence	Oct	103.3	99.5	103.6	103.5
Sweden	Manufacturing Confidence s.a.	Oct	117	115.4	117.5	117.3
Austria	Industrial Prod. WDA YoY	Aug	--	2.80%	4.80%	5.00%
Sweden	PPI YoY	Sep	--	10.10%	9.30%	--
Germany	IFO Business Climate	Oct	103.2	102.8	103.7	--
Germany	IFO Expectations	Oct	100.4	99.8	101.0	100.9
Germany	IFO Current Assessment	Oct	106	105.9	106.4	106.6

Volatility

TIME WINDOW SETTING:		TOTAL RETURN PERFORMANCE	IVOL PREMIUM/DISCOUNT						REALIZED VOLATILITY TRENDS			IMPLIED VOLATILITY TRENDS							
VOLATILITY_30D			IVOL PREM %		Yesterday	1W Ago	1M Ago	ITM Z-Score	3Yr Z-Score	RVOL		PERCENTILE	IVOL	PERCENTILE					
PUT_IMP_VOL_30D	TICKER		YTD %	IVOL / RVOL						CURRENT	MM %	10YR	CURRENT	MM %	10YR				
US EQUITIES																			
CURRENT																			
Utilities Sector SPDR ETF	XLU US EQUITY	7.54%	0%	-4%	-6%	8%	-0.3	-0.3	17.5	48%	77%	17.6	36%	79%					
Health Care Sector SPDR ETF	XLV US EQUITY	6.75%	16%	4%	-7%	38%	0.2	0.2	19.2	166%	81%	22.2	124%	89%					
Power Shares QQQ Trust ETF	QQQ US EQUITY	6.75%	15%	2%	-4%	25%	0.2	0.1	26.2	124%	86%	30.1	107%	92%					
Technology Sector SPDR ETF	XLK US EQUITY	6.10%	30%	15%	-21%	33%	0.5	0.5	27.4	150%	90%	35.6	144%	95%					
Consumer Discretionary Sector SPDR ETF	XLY US EQUITY	5.88%	25%	11%	-12%	16%	0.2	0.3	19.8	83%	75%	24.7	98%	82%					
SPDR S&P 500 ETF Trust	SPY US EQUITY	0.72%	18%	10%	-7%	21%	0.2	0.1	17.8	153%	75%	21.0	145%	81%					
Consumer Staples Sector SPDR ETF	XLP US EQUITY	-1.79%	10%	-6%	2%	7%	0.1	0.0	15.1	61%	79%	16.6	66%	85%					
Vanguard Real Estate REIT ETF	VNQ US EQUITY	-2.73%	-9%	-12%	-15%	-2%	-0.5	-0.6	19.1	78%	64%	17.3	65%	57%					
I-Shares Russell 2000 ETF	IWM US EQUITY	-3.44%	23%	21%	14%	22%	0.3	0.6	20.1	115%	67%	24.8	118%	75%					
Energy Sector SPDR ETF	XLE US EQUITY	-6.51%	21%	22%	10%	-7%	0.6	0.7	22.2	46%	60%	26.9	90%	76%					
Industrials Sector SPDR ETF	XLI US EQUITY	-7.24%	112%	20%	8%	15%	3.3	3.5	19.8	124%	70%	42.0	313%	96%					
Financials Sector SPDR ETF	XLF US EQUITY	-8.44%	27%	11%	-3%	24%	0.5	0.7	20.6	83%	66%	26.1	86%	76%					
Materials Sector SPDR ETF	XLB US EQUITY	-15.44%	42%	34%	15%	-2%	1.3	1.4	18.6	51%	55%	26.4	117%	79%					
Communication Services	XLC US EQUITY		38%	38%	30%	44%			23.9	90%	100%	33.0	83%	100%					
INTERNATIONAL EQUITIES																			
Euro Stoxx 50 Index	SX5E INDEX	-7.79%	40%	36%	15%	5%	1.0	0.7	13.7	32%	23%	19.1	75%	48%					
I-Shares MSCI Japan ETF	EWJ US EQUITY	-9.41%	8%	4%	-1%	-7%	0.3	-0.1	19.1	55%	68%	20.6	79%	70%					
I-Shares China Large-Cap ETF	FXI US EQUITY	-14.99%	13%	5%	15%	-12%	1.1	0.4	26.3	11%	66%	29.7	43%	77%					
I-Shares MSCI Emerging Markets ETF	EEM US EQUITY	-18.01%	19%	5%	8%	-15%	1.2	0.7	24.0	16%	71%	28.6	63%	78%					
CURRENCIES																			
PowerShares US Dollar Index ETF	UUP US EQUITY	6.74%	33%	33%	47%	7%	1.3	1.2	5.3	-7%	12%	7.0	15%	22%					
Currency Shares Japanese Yen ETF	FXJ US EQUITY	0.11%	31%	20%	24%	9%	1.0	1.1	5.5	-4%	6%	7.2	16%	11%					
Currency Shares British Pound ETF	FXB US EQUITY	-4.73%	14%	13%	13%	5%	0.4	0.3	9.0	-2%	59%	10.2	6%	68%					
Currency Shares Euro Trust ETF	FXE US EQUITY	-5.63%	21%	13%	13%	-2%	1.5	0.8	6.3	-9%	11%	7.6	12%	25%					
COMMODITIES																			
United States Oil Fund ETF	USO US EQUITY	16.99%	-1%	-4%	5%	16%	-0.3	-0.3	27.6	28%	48%	27.3	8%	36%					
United States Natural Gas Fund ETF	UNG US EQUITY	13.12%	24%	28%	38%	17%	0.5	0.7	34.3	53%	42%	42.5	63%	59%					
SPDR Gold Shares ETF	GLD US EQUITY	-5.65%	2%	-4%	-4%	-18%	-0.3	-0.3	11.1	-4%	22%	11.3	20%	14%					
PowerShares DB Agriculture Fund ETF	DBA US EQUITY	-6.08%	29%	40%	30%	30%	0.1	0.0	11.3	-8%	36%	14.6	-9%	48%					
PowerShares DB Base Metals Fund ETF	DBB US EQUITY	-14.84%	15%	13%	8%	-2%	-0.4	-0.3	18.5	-17%	47%	21.2	-3%	43%					
FIXED INCOME																			
I-Shares IBOXX HY Corporate Bond ETF	HYG US EQUITY	0.58%	75%	57%	35%	19%	1.8	1.6	4.2	53%	21%	7.3	125%	48%					
I-Shares 7-10 Year Treasury Bond ETF	IEF US EQUITY	-2.79%	32%	31%	10%	51%	0.6	0.9	4.3	34%	16%	5.7	18%	32%					
I-Shares IBOXX IG Corporate Bond ETF	LQD US EQUITY	-4.65%	18%	16%	4%	15%	0.2	0.0	4.3	16%	22%	5.0	18%	29%					
I-Shares J.P. Morgan USD EM Bond ETF	EMB US EQUITY	-6.50%	48%	21%	16%	-19%	0.9	0.6	5.1	-21%	36%	7.6	43%	55%					
I-Shares 20+ Year Treasury Bond ETF	TLT US EQUITY	-7.71%	6%	-1%	-3%	19%	0.4	0.2	10.4	39%	19%	11.0	24%	23%					

U.S. Equities: Returns

U.S. EQUITIES	Ticker	D/D %	W/W%	1M%	3M%	6M%	Y/Y%	WTD%	MTD%	YTD%
S&P 500 Index	SPX	-3.09%	-5.45%	-8.90%	-6.67%	0.82%	3.55%	-4.04%	-8.85%	-0.65%
Nasdaq 100 Index	NDX	-4.63%	-6.73%	10.23%	-9.58%	4.30%	11.89%	-4.48%	-10.99%	6.14%
Dow Jones Industrial Average	INDU	-2.41%	-4.37%	-7.21%	-3.27%	2.33%	5.63%	-3.38%	-7.09%	-0.55%
Russell 2000 Index	RTY	-3.79%	-7.61%	14.05%	-12.85%	-5.45%	-1.92%	-4.76%	-13.43%	-4.35%
SPDR S&P 500 ETF Trust	SPY	-3.03%	-5.39%	-8.75%	-6.58%	0.89%	3.60%	-3.96%	-8.74%	-0.58%
Consumer Discretionary Select Sector SPDR ETF	XLY	-2.99%	-5.38%	-11.19%	-7.93%	2.00%	14.17%	-2.58%	-11.62%	4.98%
Financials Select Sector SPDR ETF	XLF	-2.51%	-6.59%	10.84%	-10.11%	-8.78%	-5.18%	-5.36%	-8.48%	-9.57%
Health Care Select Sector SPDR ETF	XLV	-3.30%	-6.55%	-7.31%	-1.76%	6.72%	4.33%	-4.61%	-8.26%	5.58%
Technology Select Sector SPDR ETF	XLK	-4.48%	-5.98%	-10.31%	-9.52%	3.63%	10.46%	-4.06%	-10.83%	5.04%
Communication Services Sector SPDR ETF	XLC	-4.77%	-6.79%	-8.65%	-14.36%			-5.03%	-9.45%	
Consumer Staples Select Sector SPDR ETF	XLP	0.42%	2.26%	1.65%	3.24%	9.26%	1.65%	0.11%	1.52%	-3.76%
Industrials Select SPDR ETF	XLI	-3.39%	-7.28%	-11.60%	-8.11%	-5.59%	-4.41%	-5.30%	-11.61%	-8.42%
Materials Select Sector SPDR ETF	XLB	-3.16%	-6.62%	14.97%	-14.65%	-11.76%	-13.85%	-4.88%	-12.81%	16.55%
Energy Select Sector SPDR ETF	XLE	-3.95%	-8.77%	13.72%	-13.08%	-9.31%	-1.85%	-7.49%	-12.64%	-8.43%
Utilities Select Sector SPDR ETF	XLU	2.43%	2.95%	6.48%	5.70%	9.00%	0.62%	1.21%	4.90%	4.84%
Real Estate Select SPDR ETF	XLRE	1.17%	1.43%	-1.63%	-2.14%	5.38%	-2.05%	0.38%	-2.05%	-3.04%
I-Shares US Telecommunications ETF	IYZ	-3.52%	-3.63%	-7.62%	0.25%	-0.68%	-8.87%	-2.98%	-7.03%	-5.98%
I-Shares Russell 2000 ETF	IWM	-3.77%	-7.60%	-14.16%	-12.87%	-5.49%	-1.95%	-4.83%	-13.41%	-4.27%
I-Shares Russell 2000 Value ETF	IWN	-3.30%	-6.92%	12.25%	-11.73%	-5.84%	-5.22%	-4.63%	-11.34%	-6.23%
I-Shares Russell 2000 Growth ETF	IWO	-4.31%	-8.36%	15.99%	-13.81%	-5.23%	1.02%	-5.03%	-15.34%	-2.47%
I-Shares Russell 1000 ETF	IWB	-3.08%	-5.59%	-9.52%	-6.99%	0.31%	3.16%	-4.02%	-9.05%	-1.04%
I-Shares Russell 1000 Value ETF	IWD	-2.41%	-4.71%	-8.30%	-5.59%	-2.65%	-2.38%	-3.86%	-7.24%	-5.54%
I-Shares Russell 1000 Growth ETF	IWF	-3.79%	-6.45%	10.76%	-8.49%	3.03%	8.54%	-4.26%	-10.90%	3.19%
Power Shares QQQ Trust ETF	QQQ	-4.58%	-6.74%	-10.21%	-9.56%	4.34%	11.91%	-4.44%	-11.01%	6.15%

U.S. Equities: Returns

U.S. EQUITIES	Ticker	D/D %	W/W%	1M%	3M%	6M%	Y/Y%	WTD%	MTD%	YTD%
Facebook	FB	-5.41%	-8.39%	-11.44%	-32.86%	-8.55%	-14.73%	-5.20%	-11.20%	17.24%
Amazon	AMZN	-5.91%	-9.15%	15.72%	-10.70%	13.98%	72.22%	-5.66%	-16.91%	42.30%
Apple	AAPL	-3.43%	-2.76%	-3.20%	10.40%	32.01%	37.73%	-1.92%	-4.72%	27.10%
Netflix	NFLX	-9.40%	17.24%	18.30%	-16.82%	-1.69%	56.82%	-9.27%	-19.32%	57.24%
Google	GOOG	-4.80%	-5.82%	-11.31%	-16.85%	3.01%	8.49%	-4.17%	-11.96%	0.41%
SPDR Dow Jones Industrial Average ETF Trust	DIA	-2.40%	-4.41%	-7.21%	-3.30%	2.31%	5.58%	-3.41%	-7.10%	-0.70%
I-Shares Transportation Average ETF	IYT	-3.30%	-7.33%	12.60%	-9.18%	-4.82%	-0.39%	-5.12%	-12.93%	-7.06%
SPDR Oil & Gas Exploration & Production ETF	XOP	-6.03%	13.29%	-18.13%	-17.00%	-7.66%	9.75%	-10.80%	-17.58%	-4.03%
I-Shares Nasdaq Biotechnology ETF	IBB	-5.76%	10.36%	14.49%	-13.84%	-0.45%	-5.89%	-7.56%	-15.69%	-3.71%
SPDR S&P Metals & Mining ETF	XME	-4.07%	-7.96%	12.62%	-17.69%	-14.33%	-6.87%	-5.22%	-10.25%	15.70%
VanEck Vectors Gold Miners ETF	GDV	-1.14%	-0.20%	5.41%	-8.85%	-12.47%	-14.13%	-0.70%	7.29%	14.50%
I-Shares US Home Construction ETF	ITB	-2.82%	-7.23%	18.94%	-20.51%	-22.54%	-23.09%	-2.85%	-16.10%	32.18%
SPDR S&P Insurance ETF	KIE	-2.92%	-5.70%	10.09%	-6.64%	-7.09%	-6.16%	-5.08%	-9.64%	-5.64%
SPDR S&P Regional Banking ETF	KRE	-4.29%	10.24%	17.00%	-17.94%	-18.20%	-10.50%	-7.11%	-14.47%	13.64%
VanEck Vectors Semiconductor ETF	SMH	-6.71%	10.33%	16.33%	-16.04%	-8.61%	-10.06%	-6.58%	-16.56%	-9.19%
SPDR S&P Retail ETF	XRT	-1.94%	-3.63%	-9.66%	-7.41%	3.67%	12.80%	-0.52%	-9.86%	1.79%
I-Shares US Broker-Dealers & Security Exchanges ETF	IAI	-2.37%	-6.08%	-9.60%	-13.06%	-11.55%	0.95%	-4.92%	-6.48%	-7.28%
I-Shares US Oil Equipment & Services ETF	IEZ	-4.95%	13.76%	18.55%	-15.12%	-19.35%	-6.80%	-10.39%	-17.14%	17.62%
I-Shares Pharmaceuticals ETF	IHE	-4.35%	-7.54%	-10.13%	-5.53%	3.34%	-3.82%	-5.71%	-9.96%	-2.10%
I-Shares US Medical Devices ETF	IHI	-2.37%	-6.82%	-11.08%	-4.79%	7.51%	16.61%	-3.04%	-11.34%	16.24%
Vanguard REIT ETF	VNQ	0.94%	0.64%	-2.59%	-3.75%	5.16%	-6.28%	-0.03%	-3.20%	-5.88%
SPDR Dow Jones REIT ETF	RWR	0.94%	0.49%	-2.69%	-3.16%	6.51%	-2.86%	-0.08%	-3.26%	-3.71%

U.S. Market Style Factor Performance (Total Return %)

	SECURITY	TICKER	PRICE (\$)	DD %	5D %	1Mth %	3Mth %	6Mth %	1Yr %	MTD %	YTD %
VALUE	iShares Russell 1000 Value ETF	IWD US Equity	\$117.45	-2.41%	-4.71%	-8.09%	-4.54%	-1.46%	-0.26%	-7.24%	-3.84%
	Vanguard Value ETF	VTV US Equity	\$102.78	-2.64%	-4.81%	-8.05%	-3.77%	0.09%	2.85%	-7.14%	-1.53%
	Alpha Architect Quantitative Value ETF	QVAL US Equity	\$27.65	-3.09%	-5.87%	-12.24%	-11.99%	-6.12%	2.00%	-10.85%	-9.32%
	Invesco S&P 500 Pure Value ETF	RPV US Equity	\$62.55	-3.23%	-5.67%	-9.88%	-5.69%	-4.36%	1.04%	-8.89%	-4.21%
	iShares Edge MSCI USA Value ETF	VLUE US Equity	\$79.96	-3.52%	-5.82%	-9.44%	-5.07%	-1.74%	2.56%	-8.98%	-2.76%
MOMENTUM	iShares Edge MSCI USA Momentum ETF	MTUM US Equity	\$104.26	-3.78%	-7.42%	-11.86%	-8.15%	-0.48%	5.70%	-12.39%	1.90%
	Invesco DWA Momentum ETF	PDP US Equity	\$51.82	-3.36%	-6.63%	-12.38%	-9.17%	-1.15%	3.22%	-13.04%	0.44%
	Alpha Architect Quantitative Momentum ETF	QMOM US Equity	\$28.16	-2.02%	-8.42%	-15.76%	-11.88%	-3.06%	0.93%	-17.18%	-1.55%
	SPDR Russell 1000 Momentum ETF	ONEO US Equity	\$67.50	-3.07%	-6.15%	-11.50%	-8.88%	-4.98%	-1.97%	-11.36%	-6.21%
	Fidelity Momentum Factor ETF	FDMO US Equity	\$31.58	-3.22%	-6.01%	-10.16%	-6.34%	0.49%	6.19%	-10.67%	1.78%
GROWTH	iShares Russell 1000 Growth ETF	IWF US Equity	\$138.98	-3.79%	-6.45%	-10.36%	-7.01%	3.63%	9.62%	-10.90%	4.10%
	Nasdaq 100 Index	QQQ US Equity	\$165.34	-4.58%	-6.74%	-10.09%	-8.13%	4.75%	12.58%	-11.01%	6.75%
	Invesco S&P 500 Pure Growth ETF	RPG US Equity	\$104.57	-3.98%	-7.35%	-12.87%	-11.62%	-3.48%	2.03%	-13.05%	0.03%
	Vanguard Growth ETF	VUG US Equity	\$143.74	-3.56%	-6.22%	-10.08%	-7.49%	3.14%	7.84%	-10.74%	3.03%
	iShares North American Tech-Software ETF	IGV US Equity	\$175.97	-4.45%	-8.01%	-12.96%	-9.35%	2.52%	15.14%	-14.15%	13.88%
LOW VOL & YIELD	iShares Edge MSCI Min Vol USA ETF	USMV US Equity	\$54.20	-1.53%	-2.59%	-4.77%	-0.23%	5.55%	7.53%	-4.98%	4.19%
	Invesco S&P 500 Low Volatility ETF	SPLV US Equity	\$47.69	-0.38%	-1.29%	-3.87%	-0.39%	3.93%	4.14%	-3.52%	1.66%
	Invesco S&P 500 High-Div Low-Vol ETF	SPHD US Equity	\$39.95	-0.77%	-1.48%	-3.66%	-1.82%	3.90%	0.05%	-3.19%	-2.57%
	Vanguard High Dividend Yield ETF	VYM US Equity	\$81.66	-2.20%	-4.19%	-7.13%	-3.39%	0.50%	1.29%	-6.23%	-2.46%
	iShares Select Dividend ETF	DVY US Equity	\$95.10	-1.24%	-2.33%	-5.41%	-2.59%	0.84%	3.02%	-4.67%	-1.06%
QUALITY	iShares Edge MSCI USA Quality Factor ETF	QUAL US Equity	\$81.55	-3.07%	-5.56%	-9.86%	-5.11%	1.48%	4.43%	-9.76%	-0.33%
	Invesco S&P 500 Quality Factor ETF	SPHQ US Equity	\$29.64	-3.39%	-5.51%	-9.02%	-4.34%	1.79%	2.38%	-9.63%	-1.50%
	Fidelity U.S. Quality Factor ETF	FQAL US Equity	\$31.63	-2.86%	-5.27%	-8.87%	-5.28%	2.35%	5.64%	-8.64%	0.64%
	Barron's 400 ETF	BFOR US Equity	\$39.02	-3.52%	-7.83%	-14.01%	-11.45%	-6.32%	-2.87%	-13.26%	-6.17%
	Vanguard U.S. Quality Factor ETF	VFQY US Equity	\$76.01	-2.80%	-6.12%	-11.40%	-9.41%	-0.70%	NA	-11.16%	NA

S&P 500 Sector Performance & Dispersion

SECTOR PERFORMANCE (ABSOLUTE TOTAL RETURN %)

SECURITY	TICKER	PRICE (\$)	DD %	5D %	1Mth %	3Mth %	6Mth %	1Yr %	3Yr %	MTD %	YTD %
S&P 500 SPDR ETF Trust	SPY US Equity	\$278.30	-3.17%	-4.60%	-2.96%	0.24%	5.91%	11.29%	13.60%	-4.27%	5.65%
Energy Sector SPDR ETF	XLE US Equity	\$75.35	-3.14%	-2.76%	4.25%	-1.95%	9.27%	13.43%	6.04%	-0.51%	6.46%
Materials Sector SPDR ETF	XLB US Equity	\$54.24	-2.62%	-7.03%	-7.71%	-8.36%	-5.58%	-4.66%	9.21%	-6.37%	-9.20%
Industrials Sector SPDR ETF	XLI US Equity	\$75.40	-3.22%	-5.28%	-2.86%	2.76%	3.27%	6.87%	14.45%	-3.83%	0.93%
Consumer Discretionary Sector SPDR ETF	XLY US Equity	\$108.42	-3.37%	-5.63%	-6.26%	-2.78%	7.25%	20.12%	13.33%	-7.51%	10.80%
Consumer Staples Sector SPDR ETF	XLP US Equity	\$53.41	-1.20%	-0.39%	-1.42%	2.18%	3.21%	1.43%	5.32%	-0.96%	-4.20%
Health Care Sector SPDR ETF	XLV US Equity	\$92.18	-2.36%	-3.30%	0.25%	6.40%	13.23%	13.34%	12.13%	-3.12%	12.73%
Financials Sector SPDR ETF	XLF US Equity	\$27.21	-3.10%	-2.65%	-3.43%	0.55%	-1.01%	4.95%	15.04%	-1.34%	-1.30%
Technology Sector SPDR ETF	XLK US Equity	\$69.51	-4.85%	-8.46%	-5.50%	-2.82%	5.83%	17.14%	20.68%	-7.73%	9.80%
Telecommunications I-Shares ETF	IYZ US Equity	\$28.33	-2.75%	-4.90%	-3.26%	0.29%	3.97%	-7.38%	2.79%	-4.74%	-1.71%
Utilities Sector SPDR ETF	XLU US Equity	\$54.00	-0.55%	2.78%	0.21%	4.74%	9.65%	3.49%	10.92%	2.56%	5.15%
Vanguard Real Estate ETF	VNQ US Equity	\$78.26	-1.49%	-0.81%	-4.63%	-3.82%	6.89%	-1.92%	4.35%	-3.00%	-2.53%

SECTOR DISPERSION (RELATIVE VOLATILITY TRENDS)

TIME WINDOW SETTING:

PUT_IMP_VOL_30D

SECURITY TICKER

S&P 500 SPDR ETF Trust	SPY US Equity
Energy Sector SPDR ETF	XLE US Equity
Materials Sector SPDR ETF	XLB US Equity
Industrials Sector SPDR ETF	XLI US Equity
Consumer Discretionary Sector SPDR ETF	XLY US Equity
Consumer Staples Sector SPDR ETF	XLP US Equity
Health Care Sector SPDR ETF	XLV US Equity
Financials Sector SPDR ETF	XLF US Equity
Technology Sector SPDR ETF	XLK US Equity
Telecommunications I-Shares ETF	IYZ US Equity
Utilities Sector SPDR ETF	XLU US Equity
Vanguard Real Estate ETF	VNQ US Equity

IMPLIED DISPERSION (to SPY)*

IVOL SPREAD *Z-Score Based on Ratio Series

Vol % Pts.	TTM Z-Score	3Yr Z-Score
2.0	-2.4	-2.9
4.8	-0.7	-0.8
5.9	-0.3	0.3
2.7	-1.1	-0.5
-4.0	-1.5	-1.4
-0.7	-1.9	-1.8
3.0	-1.7	-1.5
14.8	0.5	1.2
-2.3	-1.4	-1.1
-2.0	-1.8	-1.6
-1.9	-1.8	-1.7

IVOL PREMIUM/DISCOUNT

IVOL PREM %

IVOL / RVOL	TTM Z-Score	3Yr Z-Score
69%	1.6	1.7
41%	1.4	1.6
47%	1.4	1.6
80%	2.1	2.4
48%	0.8	1.0
34%	0.9	0.9
73%	2.0	2.3
50%	1.3	1.6
78%	1.8	2.0
40%	0.9	1.1
11%	0.4	0.3
9%	0.4	0.4

VOLATILITY PERCENTILE READINGS

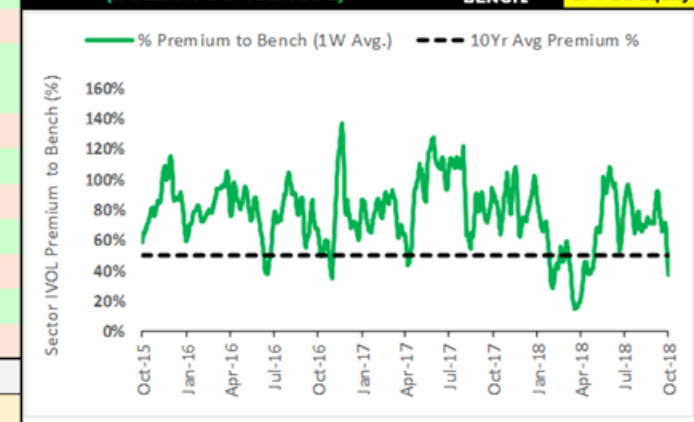
RVOL PERCENTILE IVOL PERCENTILE

MM %	10YR	MM %	10YR
66%	39%	95%	75%
-7%	23%	23%	51%
19%	44%	60%	71%
12%	42%	87%	82%
52%	53%	60%	76%
13%	52%	34%	79%
69%	26%	54%	77%
44%	33%	50%	65%
97%	75%	107%	94%
20%	12%	19%	50%
43%	62%	30%	74%
34%	50%	47%	55%

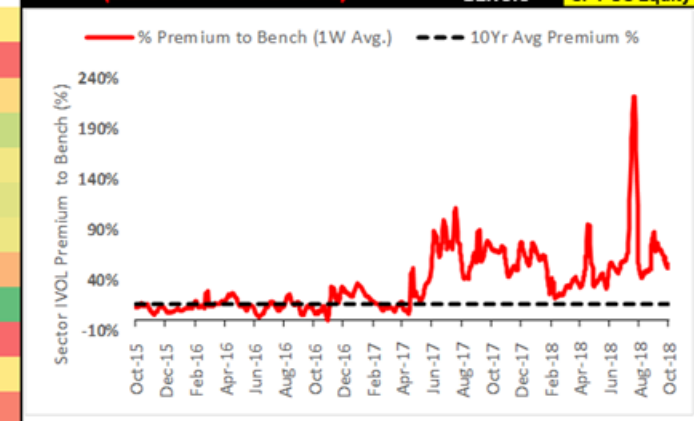
SECTOR DISPERSION DIVERGENCES

HIGHEST & LOWEST TTM Z-SCORE FACTOR READINGS

DOWNSIDE DISPERSION (BULLISH CONSENSUS)	SECTOR: XLE US Equity
	BENCH: SPY US Equity



UPSIDE DISPERSION (BEARISH CONSENSUS)	SECTOR: XLK US Equity
	BENCH: SPY US Equity



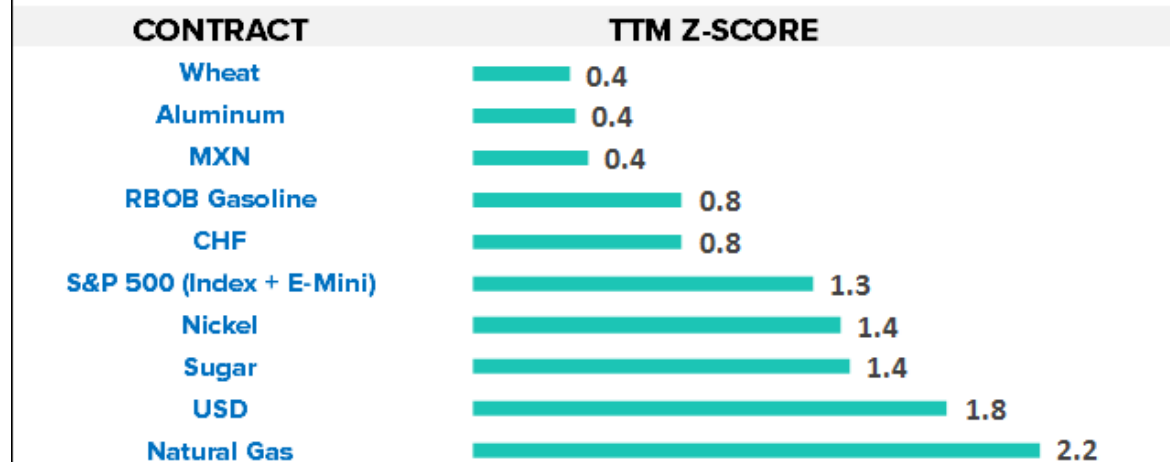
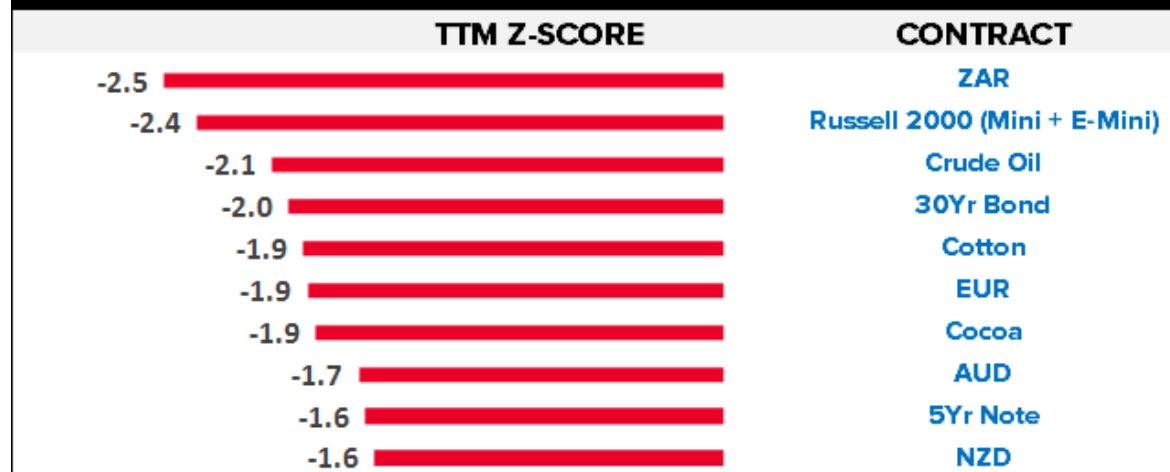
Global Volatility Indices

EQUITIES	INDEX	INDEX Level	WW%	MM%	3M%	5Yr Percentile	10Yr Percentile
CBOE S&P 500 Volatility Index	VIX Index	25.23	43.19%	106.80%	105.29%	97.2%	83.9%
CBOE S&P 500 Short-Term Volatility Index	VSTN Index*	40.80	124.67%	241.71%	226.40%	99.3%	99.3%
CBOE Nasdaq 100 Volatility Index	VXN Index	30.25	34.38%	75.36%	81.46%	99.3%	89.6%
CBOE Russell 2000 Volatility Index	RVX Index	27.97	37.85%	86.97%	88.99%	98.5%	76.3%
CBOE Dow Jones Industrial Avg. Volatility Index	VXD Index	23.00	27.07%	77.33%	73.06%	96.5%	84.6%
Deutsche Borse Euro Stoxx 50 Volatility Index	V2X Index	21.98	30.55%	60.03%	62.76%	73.5%	51.5%
Euronext FTSE 100 Volatility Index	VFTSE Index	17.27	12.53%	45.70%	45.48%	84.2%	58.6%
Euronext CAC 40 Volatility Index	VCAC Index	19.66	15.75%	50.21%	50.86%	67.6%	46.5%
OSE Nikkei Stock Avg. Volatility Index	VNKY Index	25.22	3.70%	55.97%	55.58%	76.8%	63.1%
HSE Hang Seng Volatility Index	VHSI Index	26.31	7.78%	33.22%	48.48%	93.5%	79.4%
KSE KOSPI 200 Volatility Index	VKOSPI Index	18.93	4.88%	70.69%	36.29%	95.8%	70.2%
CBOE Emerging Markets ETF Volatility Index	VXEEM Index*	31.68	31.23%	56.44%	83.65%	96.0%	90.7%
CBOE Brazil ETF Volatility Index	VXEWS Index*	46.41	21.14%	-4.41%	45.03%	87.2%	89.8%
NSE Nifty 50 Volatility Index	INVIXN Index	18.88	8.68%	8.33%	54.66%	86.0%	56.6%
COMMODITIES		INDEX Level	WW%	MM%	3M%	5Yr Percentile	10Yr Percentile
CBOE Crude Oil ETF Volatility Index	OVX Index	29.80	4.23%	10.49%	17.60%	49.2%	37.5%
CBOE Gold ETF Volatility Index	GVZ Index*	13.11	7.46%	19.51%	12.53%	30.3%	15.9%
CBOE Silver ETF Volatility Index	VXSLV Index*	20.67	2.63%	4.29%	14.20%	29.4%	19.3%
COMEX Copper 3Mth IVOL Index	IVOLCCOP Index	19.95	-4.59%	-10.57%	4.02%	55.9%	33.0%
CME Corn 3Mth IVOL Index	IVOLCORN Index	14.87	-3.29%	-19.98%	-25.58%	6.6%	3.3%
CME Soybeans 3Mth IVOL Index	IVOLSOYB Index	15.45	-6.00%	-7.10%	-23.11%	15.1%	7.5%
CURRENCIES		INDEX Level	WW%	MM%	3M%	5Yr Percentile	10Yr Percentile
Deutsche Bank FX Volatility Index	CVIX Index	7.89	0.25%	4.09%	9.74%	40.0%	22.5%
CBOE/CME Euro Volatility Index	EUVIX Index	8.15	11.49%	7.38%	16.43%	48.2%	27.8%
CBOE/CME Yen Volatility Index	JYVIX Index	8.26	13.31%	11.32%	-0.72%	26.0%	16.7%
CBOE/CME Pound Volatility Index	BPVIX Index	10.40	0.48%	-1.33%	32.82%	82.1%	65.5%
FIXED INCOME		INDEX Level	WW%	MM%	3M%	5Yr Percentile	10Yr Percentile
CBOE CBOT 10Yr Treasury Note Volatility Index	TYVIX Index	4.69	26.42%	29.56%	19.64%	36.9%	24.3%
Merrill Lynch Treasury Option Volatility Estimate Index	MOVE Index	57.69	14.97%	19.43%	19.47%	31.4%	19.1%
CBOE 20+Yr Treasury Bond ETF Volatility Index	VXTLT Index	12.68	19.51%	24.93%	28.08%	53.3%	31.8%
CBOE 7-10Yr Treasury Note ETF Volatility Index	VXIEF Index**	5.43	11.50%	-0.73%	13.84%	35.5%	35.5%
CBOE High-Yield Corporate Bond ETF Volatility Index	VXHYG Index**	9.49	29.47%	124.88%	46.68%	60.9%	60.9%

Note: *Denotes Absense of 10yrs of data; **Denotes Absense of 5yrs of data

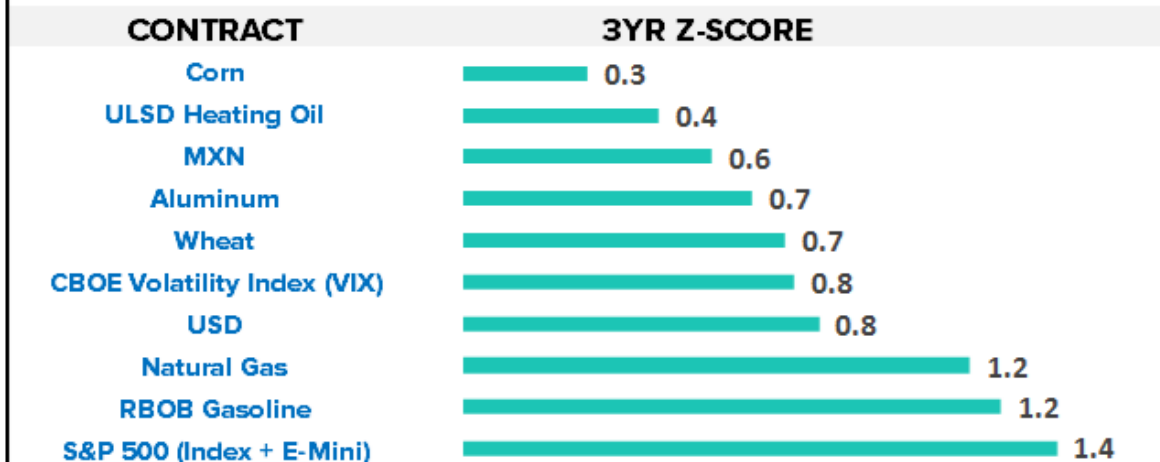
CFTC Net Futures & Options Positioning

CFTC NET FUTURES & OPTIONS POSITIONING (TTM Z-SCORE)



Data Source: CFTC, LME, Bloomberg

CFTC NET FUTURES & OPTIONS POSITIONING (3YR Z-SCORE)



Data Source: CFTC, LME, Bloomberg