

THE
MACRO
SHOW

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1

SPY



2

OIL



3

GOLD



1 SPY

The SPY signaled immediate-term TRADE #oversold (i.e. low-end of our @Hedgeye Risk Range) on political/tourist headlines earlier this week; yesterday's bounce came on #decelerating volume, but implied volatility (vs. 30-day realized) on SPY just went from a -37% DISCOUNT (pre SPY correction) to a +2% PREMIUM this morning.

2 OIL

No #bounce here with WTI flat this morning and, most importantly, still below @Hedgeye TREND resistance of \$58.44 as the U.S. Dollar continues to crush anyone who is unaware of what USD does during Global #Quad4 in Q3; Oil Volatility (OVX) would need to break-down below 32-33 to get me long Oil (waiting & watching).

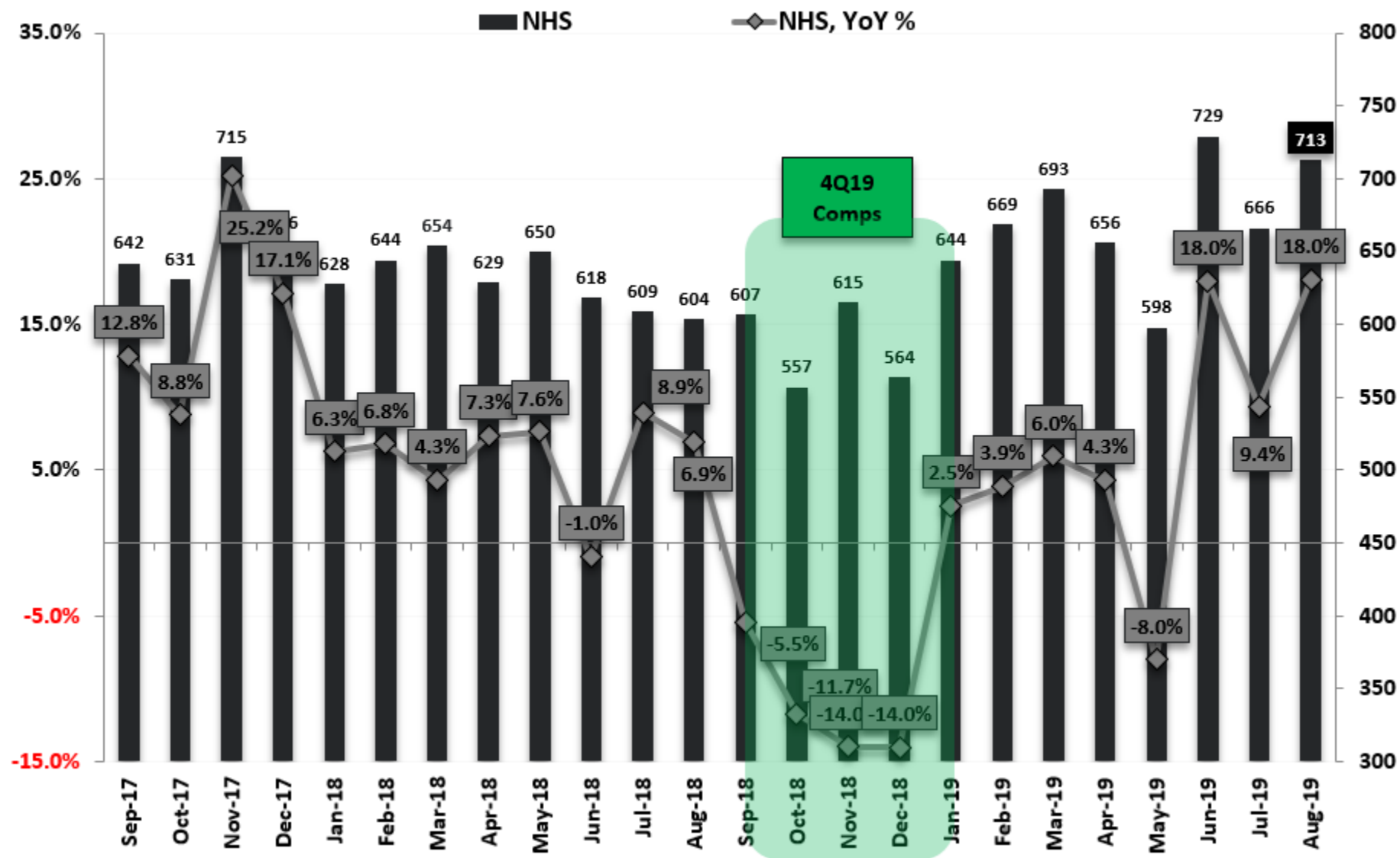
3 GOLD

Textbook immediate-term TRADE #overbought signal earlier this week (alongside a Treasuries #overbought signal when SPY signaled immediate-term #oversold) with a @Hedgeye Risk Range of \$1489-1541; use these Macro Tourist headlines as your backboard to fade both FOMO and freak-outs.

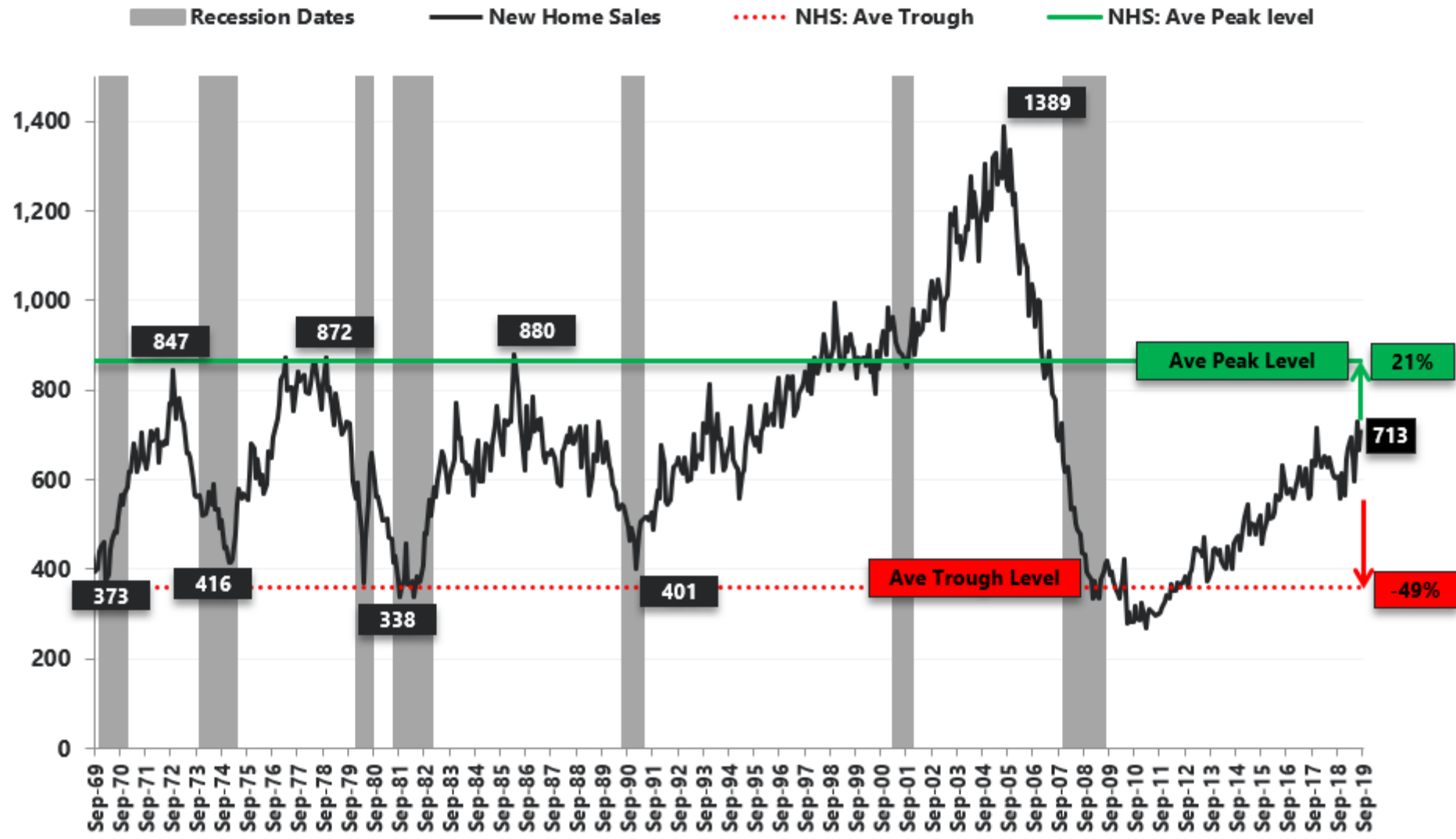
MACRO GRIND

New Home Sales

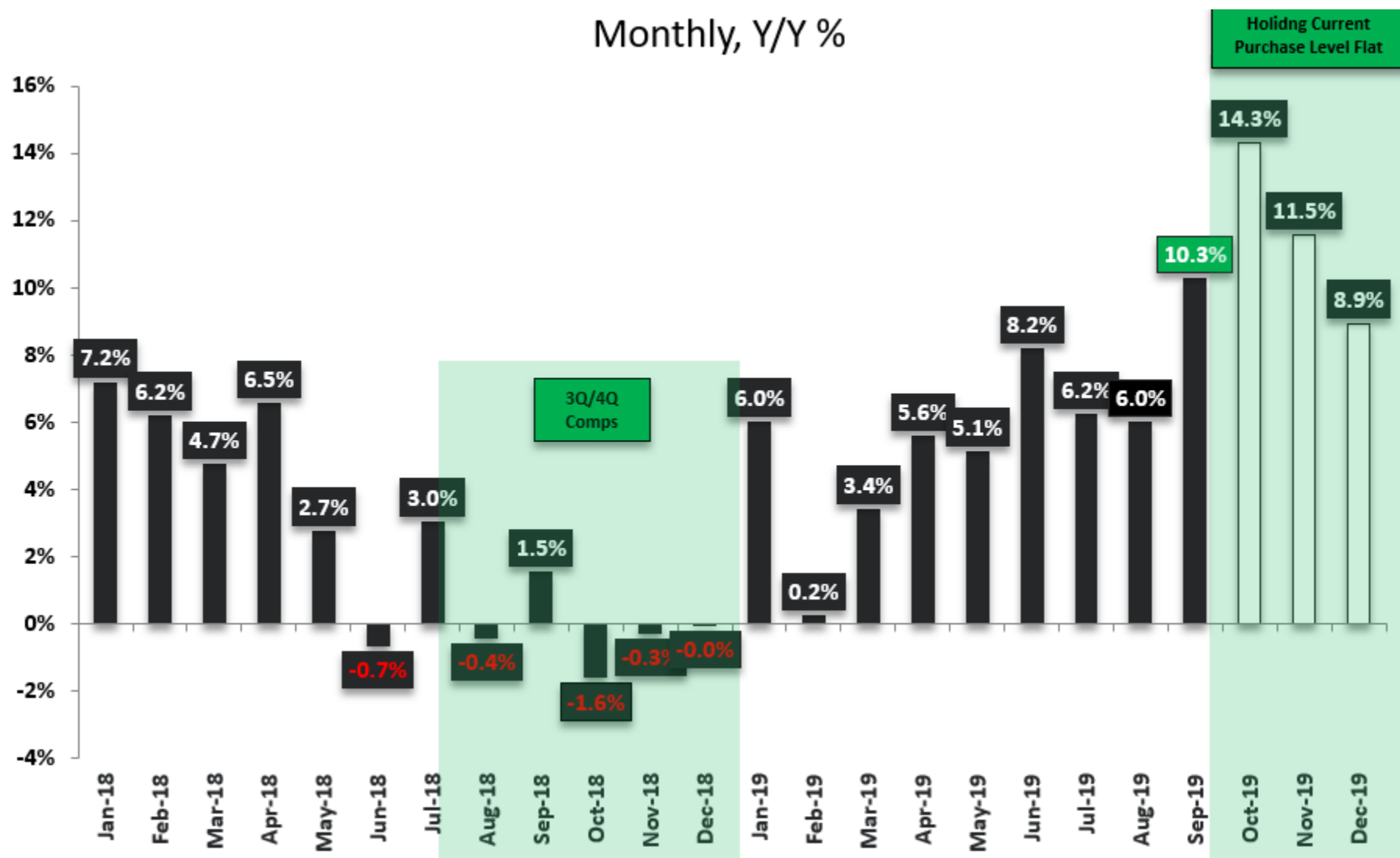
The Macro Show
September 26, 2019



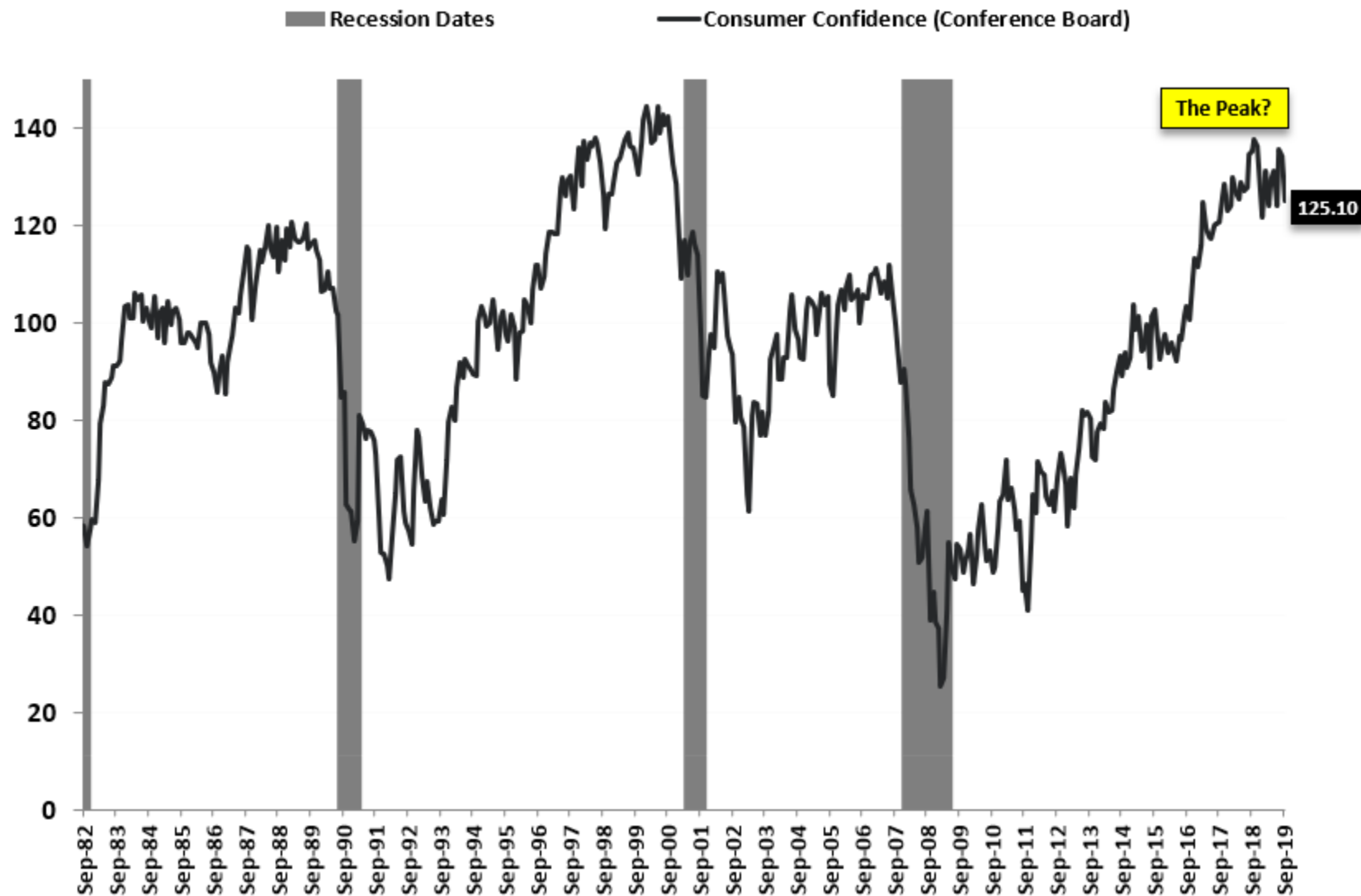
New Home Sales



MBA Mortgage Purchase Applications



Consumer Confidence: Conference Board



U.S. CONSUMER & BUSINESS CONFIDENCE

HEDGEYE TV

The Macro Show
September 26, 2019

	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	M/M Chg	3M Ave.	6M Ave.	12M Ave.
CONFERENCE BOARD CONSUMER CONFIDENCE	134.7	135.3	137.9	136.4	126.6	121.7	131.4	124.2	129.2	131.3	124.3	135.8	134.2	125.1	-9.10	131.7	130.0	129.8
Expectations	109.3	112.5	115.1	112.3	97.7	89.4	103.8	98.3	102.7	105.0	97.6	112.4	106.4	95.8	-10.60	104.9	103.3	103.0
Present Situation	172.8	169.4	171.9	172.7	169.9	170.2	172.8	163.0	169.0	170.7	164.3	170.9	176.0	169.0	-7.00	172.0	170.0	170.0
Business Conditions = Good	40.5	39.9	41.0	42.0	37.5	36.4	40.6	34.7	37.6	38.4	37.5	39.9	40.9	37.3	-3.60	39.4	38.6	38.7
Business Conditions = Bad	9.3	9.6	9.4	10.7	11.6	10.8	11.1	12.4	11.3	11.7	10.6	11.2	9.9	12.7	2.80	11.3	11.2	11.1
Jobs Plentiful (Present Conditions)	42.3	44.1	45.4	46.8	45.5	46.7	45.7	42.5	46.5	45.3	44.0	45.6	50.3	44.8	-5.50	46.9	46.1	45.8
Jobs Not-So-Plentiful (Present Conditions)	45.6	41.8	41.2	40.6	42.3	40.7	42.6	43.7	40.2	42.9	40.2	41.9	37.7	43.6	5.90	41.1	41.1	41.5
Jobs Harder to Get (Present Conditions)	12.1	14.1	13.4	12.6	12.2	12.6	11.7	13.8	13.3	11.8	15.8	12.5	12.0	11.6	-0.40	12.0	12.8	12.8
Fewer Jobs (6 Mo. Expectations)	13.2	11.4	10.6	11.2	14.6	16.2	12.3	14.3	13.2	13.0	13.9	11.1	13.7	15.7	2.00	13.5	13.4	13.3
More Jobs (6 Mo. Expectations)	21.5	22.1	22.3	22.7	16.6	15.3	19.0	16.8	16.7	18.4	17.5	19.9	19.9	17.5	-2.40	19.1	18.3	18.6
UNIV. OF MICHIGAN CONSUMER CONFIDENCE	96.2	100.1	98.6	97.5	98.3	91.2	93.8	98.4	97.2	100.0	98.2	98.4	89.8	92.0	2.20	93.4	95.9	96.1
Current Conditions	110.3	115.2	113.1	112.3	116.1	108.8	108.5	113.3	112.3	110.0	111.9	110.7	105.3	106.9	1.60	107.6	109.5	110.8
Expectations	87.1	90.5	89.3	88.1	87.0	79.9	84.4	88.8	87.4	93.5	89.3	90.5	79.9	82.4	2.50	84.3	87.2	86.7
Inflation Rate - 1Y Ahead	3.0	2.7	2.9	2.8	2.7	2.7	2.6	2.5	2.5	2.9	2.7	2.6	2.7	2.8	0.10	2.7	2.7	2.7
Inflation Rate - 5Y Ahead	2.6	2.5	2.4	2.6	2.5	2.6	2.3	2.5	2.3	2.6	2.3	2.5	2.6	2.3	-0.30	2.5	2.4	2.5
BLOOMBERG CONSUMER COMFORT	58.8	60.0	60.2	60.9	59.5	57.9	59.7	60.7	60.3	60.2	62.3	64.2	62.3	63.1	0.80	63.2	62.1	60.9
National Economy	61.9	64.0	65.1	66.7	62.3	60.7	60.7	62.8	63.8	63.1	65.1	68.1	63.4	64.3	0.86	65.3	64.6	63.8
Personal Finance	64.3	63.7	63.9	66.5	64.2	62.2	65.2	66.1	65.3	65.5	68.1	68.6	67.5	69.4	1.89	68.5	67.4	66.0
Buying Climate	50.1	52.3	51.7	49.7	52.1	50.7	53.2	53.0	52.0	52.0	53.6	55.9	55.9	55.6	-0.33	55.8	54.2	52.9
Expectations	57.0	57.5	58.5	56.0	50.0	44.5	54.5	47.5	50.0	52.5	50.5	55.0	48.5	49.5	1.00	51.0	51.0	51.4
Age: 18-34 YOA	58.0	55.2	56.5	61.5	57.0	55.8	60.1	60.3	56.5	58.6	60.9	64.2	64.1	63.3	-0.78	63.9	61.3	59.9
Age: 35-44 YOA	59.7	62.8	63.3	63.7	58.9	63.8	59.3	65.7	65.0	59.3	63.3	66.0	64.5	70.1	5.63	66.9	64.7	63.6
Age: 45-54 YOA	59.3	63.9	56.7	55.6	63.1	58.8	57.8	55.9	62.4	65.4	62.1	66.6	55.9	55.4	-0.52	59.3	61.3	59.6
Age: 55-54 YOA	57.6	60.2	60.9	60.4	54.2	55.8	61.8	61.4	58.4	57.4	61.2	60.7	61.7	61.5	-0.21	61.3	60.1	59.6
Age: 65+ YOA	59.4	60.9	63.6	62.2	64.1	57.2	58.7	59.9	61.8	59.8	63.9	63.9	63.5	63.5	-0.01	63.6	62.7	61.8
Income: 15-25K	33.1	35.4	47.2	48.4	39.0	41.9	41.9	41.2	43.5	48.2	54.6	52.4	45.8	45.8	0.01	48.0	48.4	45.8
Income: 25-40K	46.5	46.1	50.8	53.5	51.9	53.7	57.8	51.8	53.0	57.1	57.8	56.2	59.5	59.3	-0.27	58.3	57.1	55.2
Income: 40-50K	54.6	51.1	57.3	66.8	63.9	55.4	55.4	55.3	58.3	55.6	64.8	70.0	59.4	60.4	1.02	63.2	61.4	60.2
Income: 50-75K	69.8	68.5	65.2	67.0	70.1	60.0	62.6	66.6	72.7	72.6	62.1	70.9	70.0	68.4	-1.60	69.8	69.5	67.3
Income: 75-100K	75.9	77.2	71.0	66.9	70.4	71.0	73.1	75.1	71.5	76.6	75.1	71.2	72.5	72.2	-0.37	72.0	73.2	72.2
Income: 100K+	80.6	80.0	82.4	82.6	77.6	76.6	73.7	79.5	81.4	78.3	82.6	83.4	81.2	80.9	-0.30	81.8	81.3	80.0
NFIB SMALL BUSINESS OPTIMISM	108.8	107.9	107.4	104.8	104.4	101.2	101.7	101.8	103.5	105.0	103.3	104.7	103.1	103.1	-1.60	103.9	103.9	103.7
Hiring Plans	26.0	23.0	22.0	22.0	23.0	18.0	16.0	18.0	20.0	21.0	20.0	21.0	20.0	20.0	-1.00	20.5	20.4	20.1
Outlook for General Business Conditions	34.0	33.0	33.0	22.0	16.0	6.0	11.0	11.0	13.0	16.0	16.0	20.0	12.0	12.0	-8.00	16.0	15.4	16.0
Sales Expectations	26.0	29.0	28.0	24.0	23.0	16.0	16.0	19.0	20.0	23.0	17.0	22.0	17.0	17.0	-5.00	19.5	19.8	20.5
Openings Hard to Fill	38.0	38.0	38.0	34.0	39.0	35.0	37.0	39.0	38.0	38.0	36.0	39.0	35.0	35.0	-4.00	37.0	37.2	37.1
Compensation	32.0	37.0	34.0	34.0	35.0	36.0	31.0	33.0	34.0	34.0	28.0	32.0	29.0	29.0	-3.00	30.5	31.4	32.7
Compensation Plans	21.0	24.0	23.0	25.0	24.0	20.0	18.0	20.0	20.0	24.0	21.0	17.0	19.0	19.0	2.00	18.0	20.2	21.0
Higher Prices	17.0	15.0	16.0	16.0	17.0	15.0	13.0	12.0	13.0	10.0	17.0	16.0	11.0	11.0	-5.00	13.5	13.4	14.2
Capital Expenditure Plans	33.0	30.0	30.0	29.0	25.0	26.0	27.0	27.0	27.0	30.0	26.0	28.0	28.0	28.0	0.00	28.0	27.8	27.5
Credit Conditions - Availability of Loans	(5.0)	(3.0)	(4.0)	(5.0)	(5.0)	(4.0)	(6.0)	(6.0)	(4.0)	(4.0)	(2.0)	(3.0)	(1.0)	(1.0)	2.00	-2.0	-2.8	-4.0
Expected Credit Conditions	(6.0)	(5.0)	(5.0)	(5.0)	(6.0)	(5.0)	(5.0)	(7.0)	(4.0)	(5.0)	(3.0)	(4.0)	(2.0)	(2.0)	2.00	-3.0	-3.6	-4.6

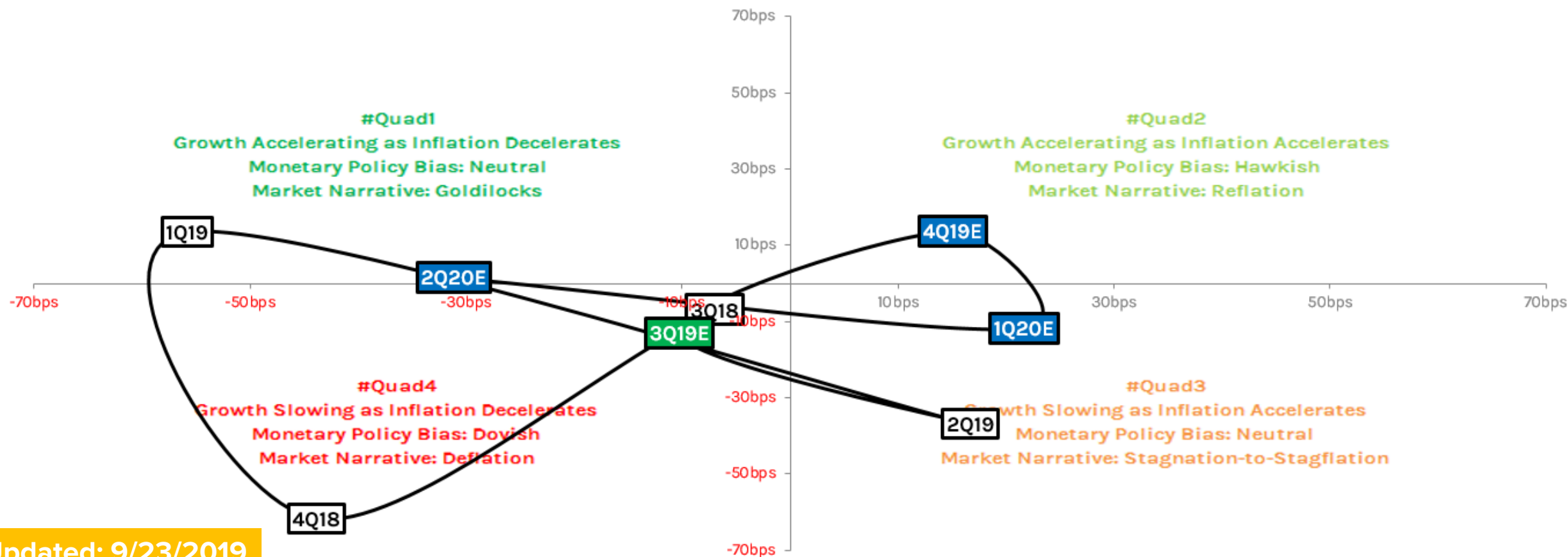
Source: Bloomberg, NFIB, Conference Board, HRM

HEDGEYE

United States	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	← Actuals Estimates →	3Q19E	4Q19E	1Q20E	2Q20E
Real GDP QoQ SAAR	2.20%	2.00%	2.30%	2.20%	3.20%	3.50%	2.50%	3.50%	2.90%	1.10%	3.10%	2.00%	Hedgeye Estimates	2.38%	1.63%	2.60%	2.08%
YoY Hurdle Rate	0.33%	0.03%	0.50%	0.48%	0.55%	0.50%	0.58%	0.55%	0.80%	0.88%	0.63%	0.88%	YoY Hurdle Rate	0.73%	0.28%	0.78%	0.50%
Real GDP YoY	1.56%	2.03%	2.10%	2.16%	2.42%	2.80%	2.86%	3.20%	3.13%	2.52%	2.65%	2.28%	Hedgeye Estimates	2.15%	2.29%	2.18%	2.19%
2Y Comparative Base Effects	2.78%	2.39%	2.80%	2.35%	2.00%	1.97%	1.86%	1.75%	1.99%	2.41%	2.48%	2.68%	2Y Comparative Base Effects	2.77%	2.66%	2.76%	2.74%
Headline CPI YoY	1.12%	1.80%	2.54%	1.90%	1.97%	2.12%	2.21%	2.71%	2.64%	2.20%	1.64%	1.81%	Headline CPI YoY	1.71%	1.86%	2.08%	1.76%
2Y Comparative Base Effects	0.95%	0.86%	0.51%	0.50%	0.61%	1.13%	1.81%	1.48%	1.54%	1.96%	2.38%	2.31%	2Y Comparative Base Effects	2.30%	2.16%	1.93%	2.26%

United States

◆ x-axis: First Difference of YoY Headline CPI;
y-axis: First Difference of YoY Real GDP



Updated: 9/23/2019

Data Source: Bloomberg. Green box = Hedgeye Predictive Tracking Algorithm nowcast. Blue boxes = Hedgeye β -Adjusted Comparative Base Effect Model estimates.

© Hedgeye Risk Management

Our Risk Management Overlay is Rules-Based

#QUAD1

- **Goldilocks.** Maximum gross exposure, wide net exposure.
- **Asset Class Overweight(s):** Equities and Credit
- **Asset Class Underweight(s):** Fixed Income and USD
- **Equity Sector Overweight(s):** Tech, Consumer Discretionary, Industrials, and Materials
- **Equity Sector Underweight(s):** Utilities, Consumer Staples, Energy, and Health Care
- **Equity Style Factor Overweight(s):** High Beta, Momentum, Quality, and Growth
- **Equity Style Factor Underweight(s):** Preferreds, Low Beta/Minimum Vol., Value, and High Dividend Yield
- **Fixed Income Overweight(s):** Convertibles, High Yield Credit, High Yield Munis, and Investment Grade Credit
- **Fixed Income Underweight(s):** TIPS, Short Duration Treasuries, MBS, and Long Duration Treasuries

#QUAD2

- **Reflation.** Maximum gross exposure, wide net exposure.
- **Asset Class Overweight(s):** Equities, Credit, and Commodities
- **Asset Class Underweight(s):** Fixed Income and USD
- **Equity Sector Overweight(s):** Tech, Consumer Discretionary, Industrials, and Energy
- **Equity Sector Underweights(s):** Telecom, Utilities, Consumer Staples, and REITS
- **Equity Style Factor Overweight(s):** Momentum, Growth, High Beta, and Small Caps
- **Equity Style Factor Underweight(s):** Low Beta/Minimum Vol., Preferreds, High Dividend Yield, and Value
- **Fixed Income Overweight(s):** Convertibles, Leveraged Loans, TIPS, and High Yield Credit
- **Fixed Income Underweight(s):** Long Duration Treasuries, Munis, Investment Grade Credit, and Short Duration Treasuries

#QUAD3

- **Stagnation-to-stagflation.** Middling gross exposure, tight net exposure.
- **Asset Class Overweight(s):** Fixed Income and Commodities
- **Asset Class Underweight(s):** Equities and Credit
- **Equity Sector Overweight(s):** Utilities, Tech, Energy, and REITS
- **Equity Sector Underweight(s):** Financials, Materials, Telecom, and Consumer Staples
- **Equity Style Factor Overweight(s):** Size, Momentum, Quality, and Growth
- **Equity Style Factor Underweight(s):** Preferreds, High Dividend Yield, Value, and Small Caps
- **Fixed Income Overweight(s):** Long Duration Treasuries, Taxable Munis, TIPS, and Investment Grade Credit
- **Fixed Income Underweight(s):** Convertibles, Leveraged Loans, Short Duration Treasuries, and High Yield Credit

#QUAD4

- **Deflation.** Minimum gross exposure, net short exposure.
- **Asset Class Overweight(s):** Fixed Income and USD
- **Asset Class Underweight(s):** Equities, Credit, and Commodities
- **Equity Sector Overweight(s):** Health Care, Consumer Staples, REITS, and Utilities
- **Equity Sector Underweight(s):** Tech, Energy, Industrials, and Financials
- **Equity Style Factor Overweight(s):** Preferreds, Low Beta/Minimum Vol., and Quality
- **Equity Style Factor Underweight(s):** Momentum, High Beta, and Growth
- **Fixed Income Overweight(s):** Long Duration Treasuries, Taxable Munis, and MBS
- **Fixed Income Underweight(s):** Convertibles, TIPS, Leveraged Loans, and High Yield Credit

Sector Performance

<u>SECTOR</u>	<u>Ticker</u>	<u>Price</u>	<u>1-Day %</u> <u>Chg</u>	<u>MTD %</u> <u>Chg</u>	<u>QTD %</u> <u>Chg</u>	<u>YTD %</u> <u>Chg</u>
Consumer Discretionary	XLY	\$120.61	0.91%	0.86%	1.18%	21.82%
Financial Select Sector	XLF	\$28.09	0.83%	4.35%	1.78%	17.93%
Health Care Select Sector	XLV	\$90.23	-0.49%	-0.41%	-2.60%	4.30%
Technology Select Sector	XLK	\$80.68	1.19%	1.45%	3.38%	30.17%
Consumer Staples Select Sector	XLP	\$60.85	0.07%	0.21%	4.79%	19.83%
Industrial Select Sector	XLI	\$77.72	0.65%	2.59%	0.39%	20.66%
Materials Select Sector	XLB	\$58.00	0.52%	2.31%	-0.85%	14.81%
The Energy Select Sector	XLE	\$60.43	0.17%	5.13%	-5.15%	5.37%
Utilities Select Sector	XLU	\$64.59	-0.06%	3.21%	8.32%	22.05%
Real Estate Select Sector	XLRE	\$39.17	-0.10%	-0.10%	6.53%	26.35%
Communications Services Sector	XLC	\$50.32	1.15%	1.59%	2.23%	21.90%
S&P 500	SPX	2,984.87	0.62%	2.00%	1.47%	19.07%

Sector Relative Performance

	<u>Ticker</u>	<u>Price</u>	<u>1-Day %</u> <u>Chg</u>	<u>MTD %</u> <u>Chg</u>	<u>QTD %</u> <u>Chg</u>	<u>YTD %</u> <u>Chg</u>
Consumer Discretionary	XLY	\$120.61	0.30%	-1.13%	-0.28%	2.75%
Financial Select Sector	XLF	\$28.09	0.21%	2.35%	0.31%	-1.14%
Health Care Select Sector	XLV	\$90.23	-1.10%	-2.40%	-4.07%	-14.77%
Technology Select Sector	XLK	\$80.68	0.58%	-0.55%	1.92%	11.10%
Consumer Staples Select Sector	XLP	\$60.85	-0.55%	-1.78%	3.32%	0.76%
Industrial Select Sector	XLI	\$77.72	0.03%	0.59%	-1.08%	1.60%
Materials Select Sector	XLB	\$58.00	-0.10%	0.31%	-2.32%	-4.26%
The Energy Select Sector	XLE	\$60.43	-0.45%	3.14%	-6.61%	-13.70%
Utilities Select Sector	XLU	\$64.59	-0.68%	1.22%	6.85%	2.98%
Real Estate Select Sector	XLRE	\$39.17	-0.72%	-2.10%	5.06%	7.29%
Communications Services Sector	XLC	\$50.32	0.53%	-0.40%	0.77%	2.83%

Market Share Volume & Total Value Traded

<u>INDEX/SECURITY</u>	VOLUME: (9/25) vs.			
	<u>Prior Day</u>	<u>1M Ave</u>	<u>3M ave</u>	<u>1Y Ave</u>
Total Market Volume*	-15%	-6%	0%	-14%
Total Exchange Volume**	-14%	-5%	-3%	-9%

*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	0.5%	-0.6%	7.9%	2.0%	4.2%	17.4%
	Low Debt/EV	0.7%	-1.1%	4.5%	-0.2%	3.5%	19.1%
SI	High Short Interest	0.7%	-1.3%	7.7%	-0.8%	-1.2%	10.8%
	Low Short Interest	0.6%	-0.5%	4.6%	2.5%	9.7%	23.2%
BETA	High Beta	1.1%	-1.7%	9.9%	-1.0%	-0.8%	11.8%
	Low Beta	0.0%	0.3%	3.2%	5.5%	11.0%	23.8%
YIELD	High Yield	0.6%	-0.7%	8.0%	0.7%	-0.1%	9.7%
	Low Yield	0.4%	-1.2%	4.7%	0.2%	5.3%	23.1%
MKT CAP	MCAP Bottom 25%	0.8%	-1.4%	9.1%	-2.1%	-2.9%	8.0%
	MCAP Top 25%	0.4%	-0.8%	4.4%	3.5%	8.5%	21.4%
Sales	Top 25% Sales Growth	0.6%	-0.9%	4.3%	1.2%	5.6%	23.3%
	Bottom 25% Sales Growth	0.8%	-0.9%	8.2%	1.8%	2.4%	12.2%
EPS	Top 25% EPS Growth	0.6%	-1.3%	5.8%	1.2%	5.7%	22.9%
	Bottom 25% EPS Growth	0.5%	-0.9%	7.1%	1.8%	2.6%	11.6%

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

September 26, 2019

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	1.87%	-2.1	-3.6	-9	-26	-61	3	32	89
3M LIBOR	2.11%	0.0	-4.6	0	-22	-71	1	24	81
2Y T-Note	1.66%	5.4	-5.8	14	-9	-131	24	-25	24
5Y T-Note	1.59%	8.0	-5.2	19	-19	-151	28	-61	-30
10Y T-Note	1.71%	9.2	-4.7	20	-31	-155	28	-78	-58
30Y T-Note	2.16%	8.3	-4.1	15	-38	-130	26	-75	-68
2Y-10Y Spread, Bps	4.79	2.8	0.2	5.2	-23	-24	5	-53	-83
IG SPREAD (AAABBB)	1.47%	0.0	2.0	1	-1	-42	9	-2	-15
HIGH YIELD	5.66%	7.0	9.0	-13	-22	-246	11	-46	-85
5Y BREAK EVEN	1.43%	2.3	-1.9	7.0	-14.3	-64.9	13.8	-38.6	-21.9

Key \$USD Correlations

METRIC	15D	30D	90D	120D	180D	52-Wk Rolling 30D Correlation			
						High	Low	% Time Pos	% Time Neg
SPX	-0.06	0.40	0.08	0.09	0.58	0.77	-0.69	51%	49%
BRENT Oil	0.11	0.20	-0.01	-0.04	0.16	0.71	-0.79	52%	48%
CRB Index	0.20	-0.46	-0.69	-0.04	-0.56	0.71	-0.73	33%	67%
GOLD	0.12	0.03	0.52	0.39	0.52	0.54	-0.91	26%	74%

*Days = Trading Days

CFTC Non-Commercial Net Long Positioning

CFTC NON-COMMERCIAL NET LONG POSITIONING

HEDGEYE TV

The Macro Show
September 26, 2019

	METRIC	Latest	W/W Chg	3M Ave	6M Ave	1Y Ave	3Y		Z-Score	
							Max	Min	1Y	3Y
EQUITIES	SPX (Index + E-mini)	4,672	(13,069)	46,837	45,889	68,654	249,638	(128,189)	-0.66X	-1.06X
	VIX	(93,429)	(26,787)	(102,215)	(116,804)	(73,201)	92,913	(180,359)	-0.31X	-0.21X
	Russell 2000 (mini)	(48,824)	8,654	(68,121)	(40,761)	(47,788)	119,390	(121,951)	-0.03X	-0.89X
	Dow Jones (mini)	39,912	2,293	38,838	29,518	27,332	95,976	(282)	1.03X	-0.17X
	Nasdaq (mini)	28,308	2,732	26,277	15,913	7,527	163,838	(24,815)	1.21X	-0.19X
	Nikkei Index	(10,342)	(3,748)	(6,873)	(10,341)	(9,941)	14,214	(16,298)	-0.11X	-1.23X
RATES	10Y UST	(310,314)	34,379	(355,828)	(303,691)	(320,300)	372,991	(758,490)	0.06X	-0.52X
	2Y UST	(143,196)	30,447	(265,369)	(182,447)	(238,326)	86,881	(421,551)	0.92X	-0.02X
	5Y UST	(93,952)	5,664	(77,182)	(87,269)	(249,197)	6,400	(866,140)	0.62X	1.01X
	UST Bonds	(49,407)	10,080	(35,229)	(35,996)	(48,995)	122,839	(142,810)	-0.01X	-0.90X
	30D Fed Funds	115,872	132,542	(54,259)	(107,951)	(93,686)	219,071	(286,025)	3.06X	1.67X
	Eurodollar	1,362,992	(129,561)	996,681	560,650	(504,555)	1,492,553	(3,110,209)	1.53X	2.59X
CURRENCIES	USD	32,036	304	28,573	27,943	31,903	56,635	(10,666)	0.03X	0.46X
	JPY	31,213	4,146	6,065	(31,717)	(55,325)	69,211	(140,151)	1.99X	1.84X
	EUR	(58,798)	5,172	(48,943)	(74,227)	(59,411)	147,318	(143,673)	0.02X	-0.76X
	GBP	(89,840)	(2,171)	(82,539)	(49,010)	(47,782)	49,216	(113,271)	-1.51X	-1.35X
	AUD	(53,375)	5,078	(57,561)	(57,341)	(53,955)	77,969	(74,181)	0.05X	-1.05X
	CAD	11,140	6,174	9,424	(17,318)	(22,872)	78,001	(99,736)	1.30X	0.52X
	MXN	96,799	3,880	114,103	127,279	86,583	156,013	(89,524)	0.21X	0.76X
	NZD	(29,797)	900	(20,507)	(14,535)	(14,035)	35,981	(35,412)	-1.29X	-1.53X
COMMODITIES	CHF	(2,605)	2,771	(10,792)	(22,240)	(20,804)	8,389	(47,216)	1.92X	1.32X
	CRUDE OIL	449,964	38,103	427,106	467,093	442,880	784,290	314,891	0.10X	-0.54X
	GOLD	247,728	(42,981)	247,758	148,276	76,810	290,709	(103,009)	1.50X	1.58X
	COPPER	(40,309)	18,627	(40,308)	(23,971)	(11,090)	67,602	(60,135)	-1.28X	-2.01X
	Natural Gas	(146,835)	22,399	(178,099)	(121,044)	(64,546)	57,455	(216,003)	-1.10X	-1.48X
	RBOB Gasoline	50,972	3,303	70,722	79,817	84,316	114,862	29,519	-2.48X	-1.44X
	ULSD Heating Oil	(814)	4,295	(4,190)	(10,379)	(773)	67,696	(25,442)	-0.00X	-0.98X
	Silver	67,299	(3,764)	47,659	24,457	20,336	107,003	(30,158)	1.55X	0.95X
	Platinum	36,975	1,500	18,651	20,687	16,479	45,610	(11,540)	1.98X	1.28X
	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	(71,960)	(37,119)	158,332	18,280	33,569	372,754	(270,560)	-0.67X	-0.76X
	Soybeans	(58,980)	(21,371)	(27,522)	(57,910)	(40,573)	210,365	(148,817)	-0.45X	-0.90X
	Wheat	3,541	8,787	23,229	(8,125)	(12,386)	63,219	(143,292)	0.52X	0.81X
	Live Cattle	20,158	(10,042)	49,724	95,188	103,933	183,134	19,421	-1.97X	-1.87X
	Lean Hogs	48,968	(8,699)	66,684	74,584	49,867	97,769	(11,151)	-0.03X	0.21X
	Sugar	(183,701)	(27,110)	(89,926)	(80,341)	(42,962)	351,383	(183,701)	-2.27X	-1.59X
	Cotton	(23,546)	5,529	(30,219)	(9,987)	10,549	132,318	(37,827)	-1.00X	-1.84X
	Coffee	(39,767)	1,864	(22,169)	(39,909)	(46,902)	67,942	(106,651)	0.31X	-0.32X
	Cocoa	(21,644)	(205)	23,979	13,073	6,027	61,244	(43,846)	-1.18X	-0.95X
	Orange Juice	(5,349)	677	(6,772)	(6,775)	(6,678)	9,066	(9,416)	0.70X	-0.82X

Volatility

The Macro Show
September 26, 2019

TIME WINDOW SETTING:		TICKER	TOTAL RETURN PERFORMANCE YTD %	IVOL PREMIUM/DISCOUNT					REALIZED VOLATILITY TRENDS			IMPLIED VOLATILITY TRENDS			
VOLATILITY_30D				IVOL PREM %					RVOL		PERCENTILE	IVOL		PERCENTILE	
PUT_IMP_VOL_30D				IVOL / RVOL	Yesterday	1W Ago	1M Ago	TTM Z-Score	3Yr Z-Score	CURRENT	MM %	10YR	CURRENT	MM %	10YR
US EQUITIES															
CURRENT															
Technology Sector SPDR ETF	XLK US EQUITY	31.46%	1%	-1%	-24%	-4%	0.0	-0.3	19.1	-27%	79%	19.4	-23%	76%	
Vanguard Real Estate REIT ETF	VNO US EQUITY	27.58%	14%	4%	-14%	9%	0.8	0.7	11.6	-20%	26%	13.2	-16%	35%	
Utilities Sector SPDR ETF	XLU US EQUITY	24.89%	8%	165%	1%	6%	0.1	0.0	11.0	-8%	29%	11.9	-7%	26%	
Power Shares QQQ Trust ETF	QQQ US EQUITY	23.97%	3%	0%	-23%	-9%	0.1	-0.3	17.6	-26%	68%	18.1	-16%	68%	
Consumer Discretionary Sector SPDR ETF	XLV US EQUITY	23.06%	-10%	-19%	-27%	0%	-0.4	-0.8	16.7	-22%	67%	15.1	-29%	51%	
Communication Services SPDR ETF	XLC US EQUITY	22.69%	7%	-2%	-14%	-5%	0.0		16.5	-30%	29%	17.7	-21%	34%	
Industrials Sector SPDR ETF	XLI US EQUITY	22.54%	4%	-5%	-22%	-4%	0.1	-0.2	16.1	-26%	59%	16.7	-20%	58%	
Consumer Staples Sector SPDR ETF	XLP US EQUITY	22.12%	-9%	177%	-11%	29%	-0.5	-0.6	12.2	-29%	65%	11.1	-50%	43%	
SPDR S&P 500 ETF Trust	SPY US EQUITY	20.75%	2%	-7%	-37%	-6%	0.0	-0.3	13.7	-32%	63%	14.0	-26%	55%	
Financials Sector SPDR ETF	XLW US EQUITY	19.74%	5%	-9%	-23%	-8%	0.0	-0.1	16.4	-32%	52%	17.3	-22%	50%	
Materials Sector SPDR ETF	XLB US EQUITY	16.58%	13%	-1%	-23%	108%	0.3	0.2	15.3	-25%	40%	17.3	-59%	49%	
I-Shares Russell 2000 ETF	IWM US EQUITY	16.21%	-8%	-10%	-22%	2%	-0.4	-0.7	20.0	-12%	72%	18.4	-20%	55%	
Energy Sector SPDR ETF	XLE US EQUITY	8.14%	-5%	-13%	-24%	4%	-0.4	-0.5	21.5	-12%	63%	20.3	-21%	54%	
Health Care Sector SPDR ETF	XLV US EQUITY	5.57%	13%	12%	-24%	-3%	0.5	0.1	12.6	-28%	43%	14.3	-16%	53%	
INTERNATIONAL EQUITIES															
Euro Stoxx 50 Index	SX5E INDEX	20.91%	30%	20%	-6%	-5%	1.3	0.4	11.4	-40%	16%	14.8	-18%	29%	
I-Shares MSCI Japan ETF	EWJ US EQUITY	13.87%	32%	2%	-14%	-3%	2.1	0.8	9.1	-40%	8%	12.0	-18%	17%	
I-Shares MSCI Emerging Markets ETF	EEM US EQUITY	6.23%	34%	7%	-4%	13%	1.8	1.6	12.4	-38%	10%	16.6	-26%	25%	
I-Shares China Large-Cap ETF	FXI US EQUITY	3.85%	23%	-1%	-4%	9%	1.4	1.0	15.3	-29%	9%	18.8	-20%	19%	
CURRENCIES															
PowerShares US Dollar Index ETF	UUP US EQUITY	6.01%	7%	33%	29%	63%	-0.3	-0.3	5.3	10%	19%	5.7	-28%	6%	
Currency Shares Japanese Yen ETF	FXJ US EQUITY	1.31%	-1%	2%	-16%	3%	-0.5	-0.5	6.4	-25%	21%	6.3	-28%	8%	
Currency Shares British Pound ETF	FXB US EQUITY	-3.13%	26%	32%	3%	32%	0.6	1.0	9.5	16%	73%	11.9	11%	89%	
Currency Shares Euro Trust ETF	FXE US EQUITY	-5.01%	6%	7%	9%	20%	0.0	0.1	5.3	-1%	8%	5.6	-12%	6%	
COMMODITIES															
United States Oil Fund ETF	USO US EQUITY	22.15%	-24%	-26%	-22%	-7%	-1.5	-1.5	46.5	31%	93%	35.2	6%	72%	
SPDR Gold Shares ETF	GLD US EQUITY	16.97%	-10%	5%	-8%	6%	-0.7	-1.0	15.5	-4%	62%	14.0	-19%	38%	
PowerShares DB Agriculture Fund ETF	DBA US EQUITY	-7.26%	19%	19%	-9%	-11%	-0.5	-0.5	11.8	-12%	48%	14.0	17%	42%	
United States Natural Gas Fund ETF	UNG US EQUITY	-12.79%	32%	36%	53%	20%	1.1	1.1	30.1	-2%	31%	39.7	9%	56%	
FIXED INCOME															
I-Shares 20+ Year Treasury Bond ETF	TLT US EQUITY	18.36%	-20%	-21%	-22%	5%	-1.3	-1.6	17.7	18%	88%	14.1	-11%	66%	
I-Shares IBOX IG Corporate Bond ETF	LQD US EQUITY	15.03%	-5%	-6%	-1%	34%	-0.7	-1.0	7.2	51%	88%	6.9	7%	81%	
I-Shares J.P. Morgan USD EM Bond ETF	EMB US EQUITY	12.40%	1%	-4%	-4%	12%	-0.2	-0.6	7.3	15%	78%	7.3	4%	54%	
I-Shares IBOX HY Corporate Bond ETF	HYG US EQUITY	11.41%	19%	-1%	-9%	11%	0.2	0.1	4.2	-33%	22%	4.9	-28%	20%	
I-Shares 7-10 Year Treasury Bond ETF	IEF US EQUITY	9.11%	-5%	0%	11%	14%	-0.4	-0.5	7.1	15%	80%	6.7	-4%	65%	

Data Source: CBOE, CME, Bloomberg

Global Data

Date Time	Country/Region	C	Event	Period	Surv(M)	Actual	Prior	Revised	Ticker
09/25/19 08:00	Brazil	BZ	PPI Manufacturing YoY	Aug	--	0.15%	0.36%	--	BPPICY Index
09/25/19 17:00	South Korea	SK	Consumer Confidence	Sep	--	96.9	92.5	--	KOCCCSI Index
09/26/19 02:00	Japan	JN	Machine Tool Orders YoY	Aug F	--	-37.00%	-33.00%	--	JNMTOY Index
09/26/19 02:00	Germany	GE	GfK Consumer Confidence	Oct	9.6	9.9	9.7	--	ECO1GFKC Index
09/26/19 04:30	Hong Kong	HK	Exports YoY	Aug	-7.40%	-6.30%	-5.70%	--	HKETEXPC Index
09/26/19 04:30	Hong Kong	HK	Imports YoY	Aug	-11.00%	-11.10%	-8.70%	--	HKETIMPC Index

Hong Kong Exports

