

THE
MACRO
SHOW

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1

CHINA



2

USD



3

EARNINGS



The background of the slide is a photograph of the People's Bank of China (PBOC) building in Beijing. The building is a large, modern structure with a curved facade and many windows. A Chinese flag is flying on a tall pole in front of the building. The sky is clear and blue. In the foreground, there is a fence and some greenery.

1

CHINA

Chinese stocks closed up a full percent on the Caixin PMI release, which claims Chinese manufacturing activity accelerated sharply to a ~3yr high in OCT... ONE day after the official PMI data signaled manufacturing growth slowed to a near ~3yr low. What didn't make it into the CNBC headlines this morning is the fact that the PBoC is being forced to tighten liquidity conditions at a faster and faster rate, highlighted by their refusal to rollover repo this week (net -\$85B drained; largest tightening since FEB) and their refusal to expand their MTLF during the entire month of OCT. No surprise to see the Shanghai Composite close flat on the week.

2

USD

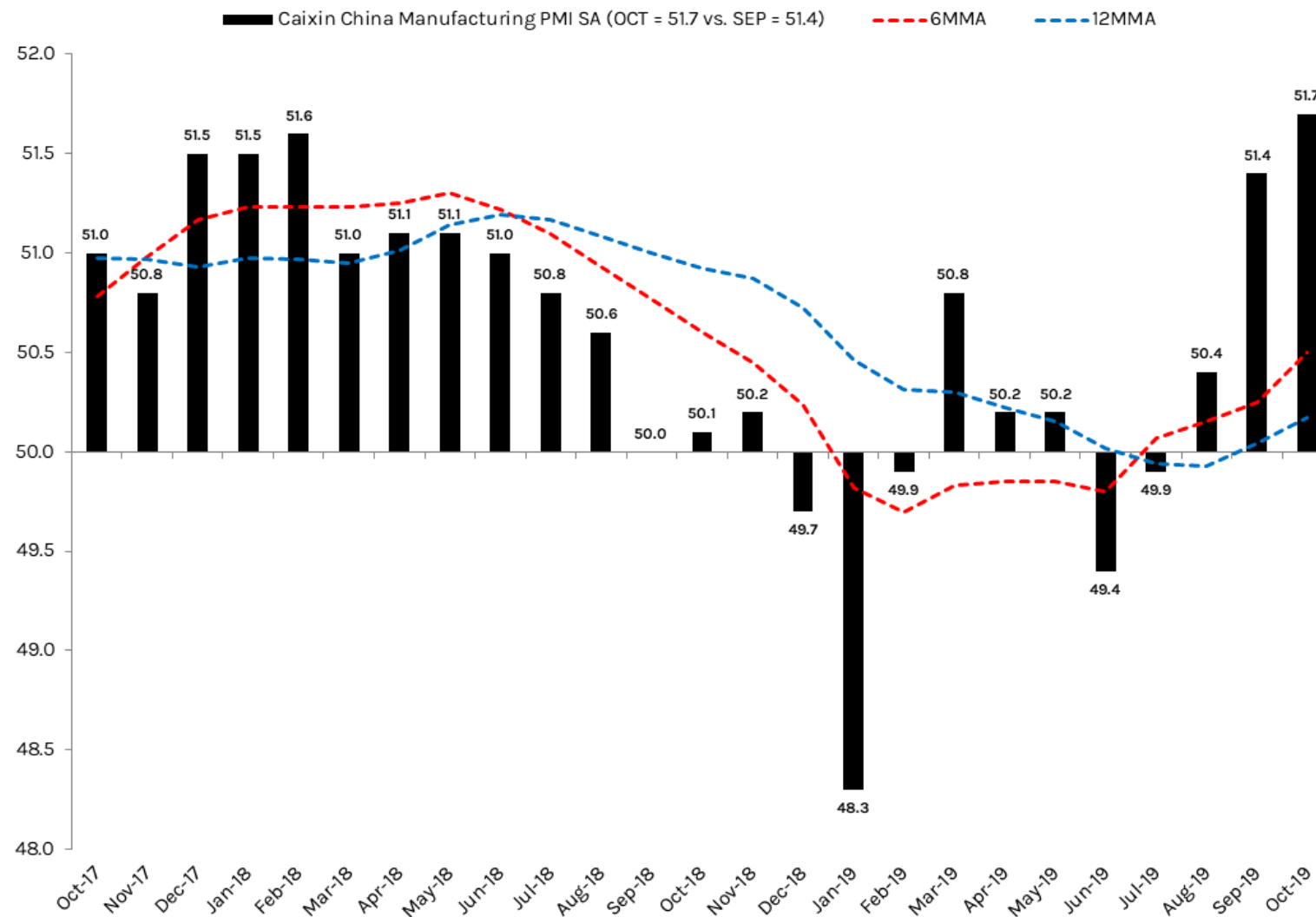
The #1, #2, and #3 factors perpetuating Beijing's inability to resuscitate the Chinese economy is the trending strength in the US dollar. While the DXY is down -0.5% WTD and -2.1% for the quarter, it still registers as bullish TREND per the @Hedgeye signal. With both the USD/JPY and GBP/USD nearing the bottom/top ends of their respective Risk Ranges (107.80-109.19 and 1.27-1.30), the dollar's consolidation process appears to be nearing an end. Could the USD make one final #Quad4, risk-off push higher here in NOV? The unprecedented divergence in Fed policy expectations suggests it may have to.

3 EARNINGS

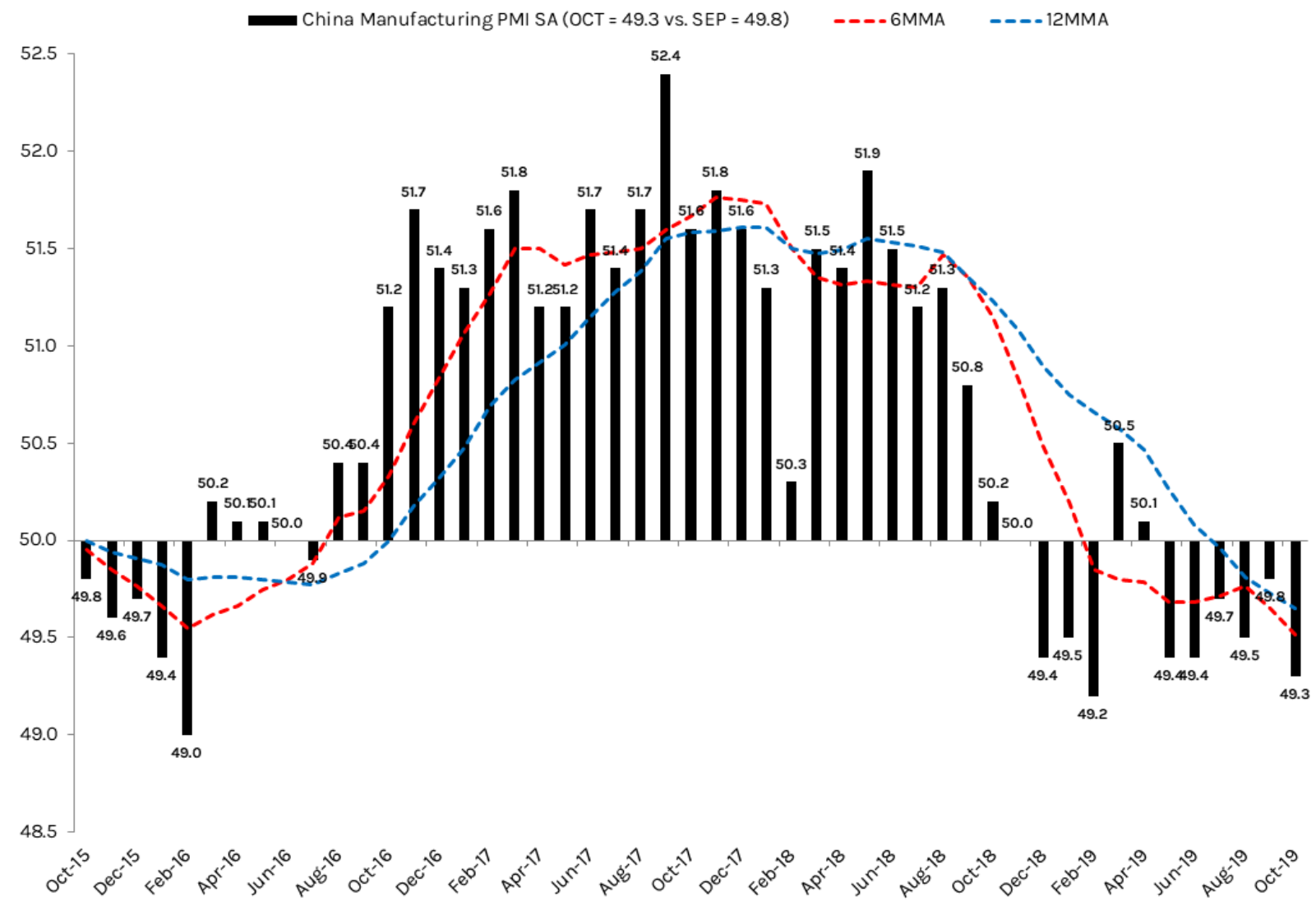
As we published back in mid-April, U.S. equities have an overwhelming tendency to peak in #Quad3. As such, this fresh month-end-markup-all-time-high in the SPY should not have come as a surprise to anyone not new to our research. To be clear, we entered Q4 thinking the #Quad4-to-#Quad3 rotation would occur later in the quarter and we were wrong on that view. The primary reason for that is earnings have indeed come in better than our expectations, with 347 of 499 constituents having reported +0.2% YoY EPS growth thus far. As always investing isn't about what you got right/wrong, but rather understanding why you got what you got right/wrong in order to proactively prepare for the future. On that front, investors who chased the rate cut + “better than expected earnings” FOMO in late-July were in the fetal position by mid-AUG and that's the risk we see developing at the current juncture. 2020 numbers are still out to lunch with respect to our outlook.

Macro Grind

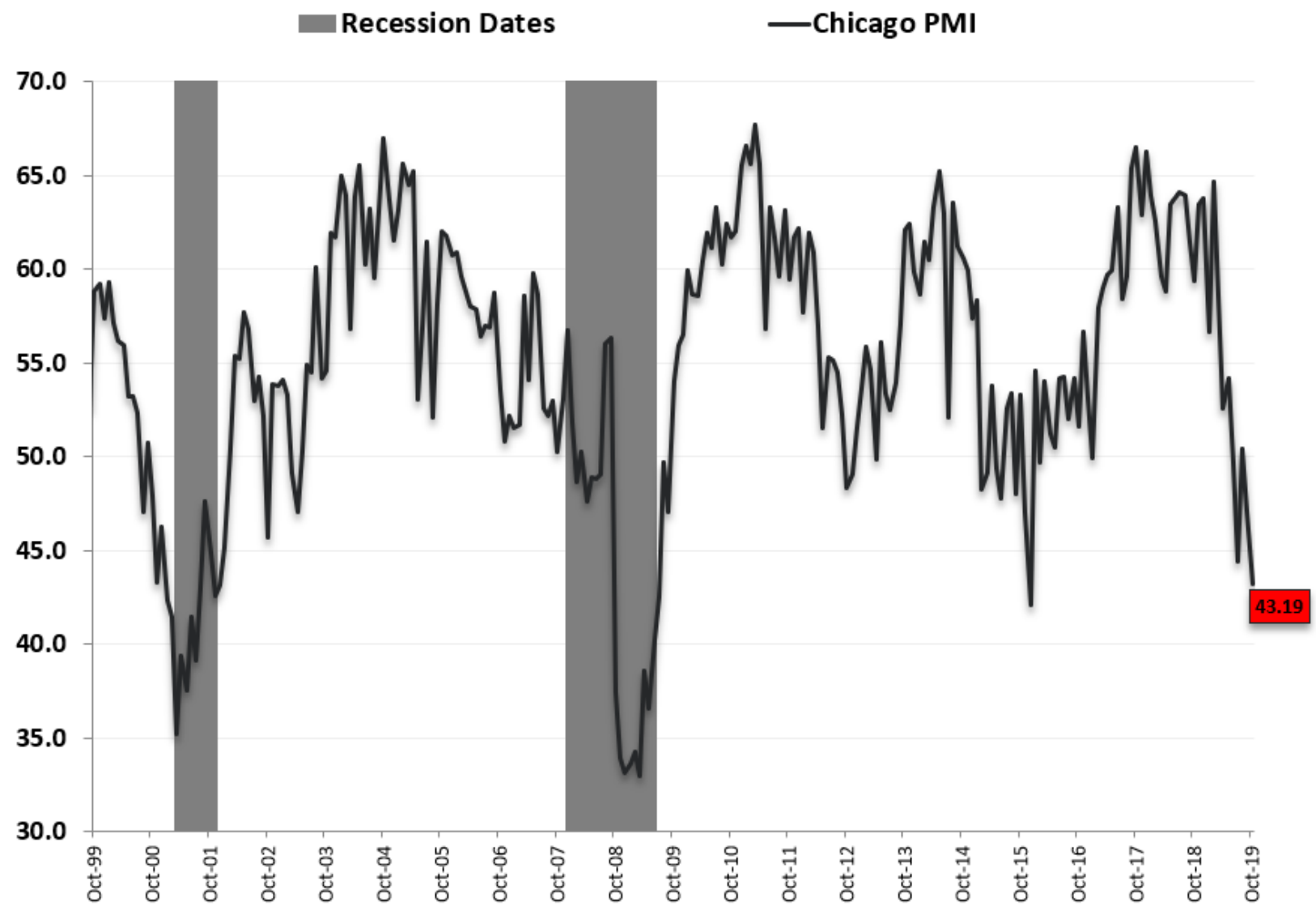
Caixin China Manufacturing PMI



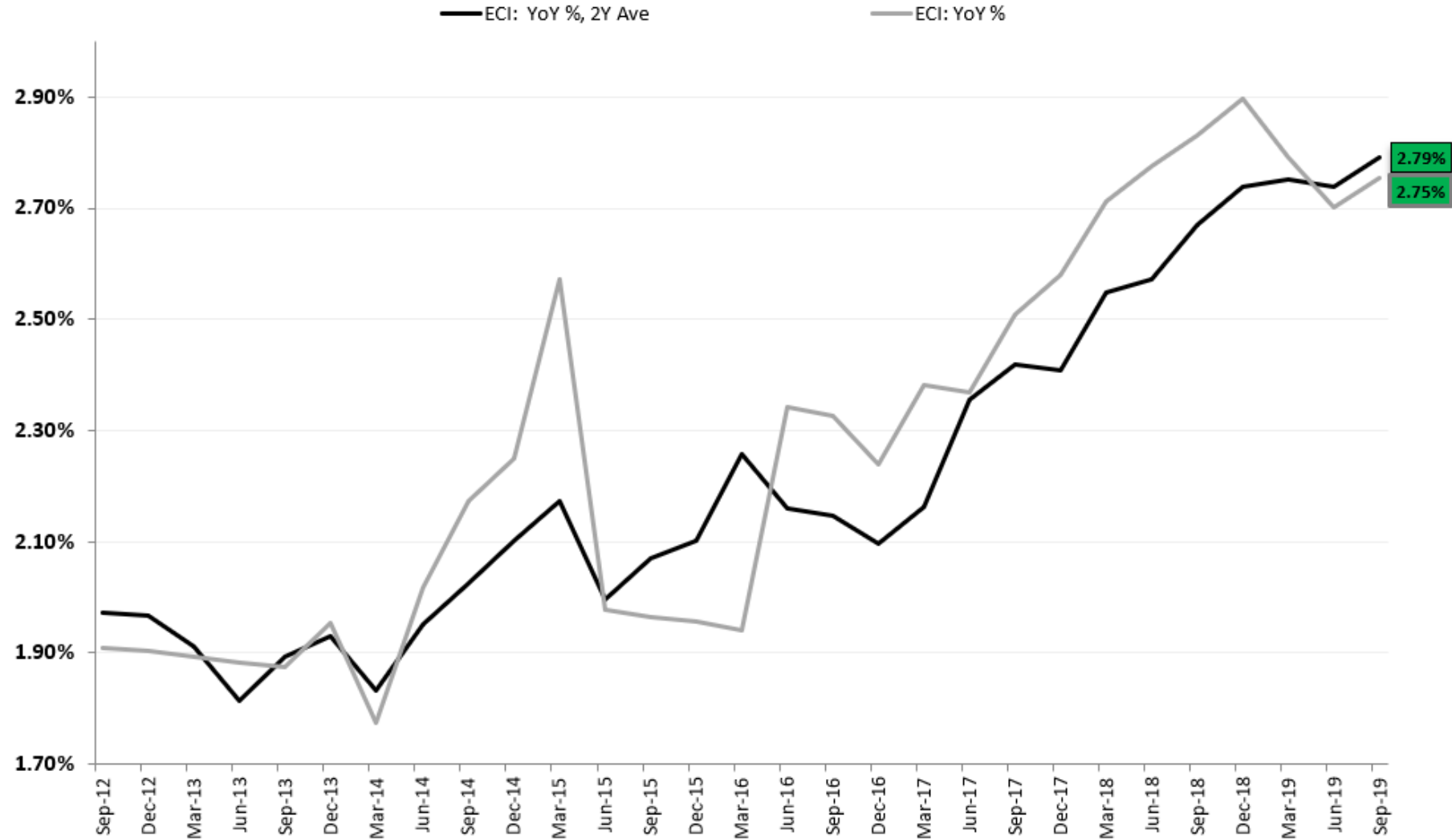
China Manufacturing PMI



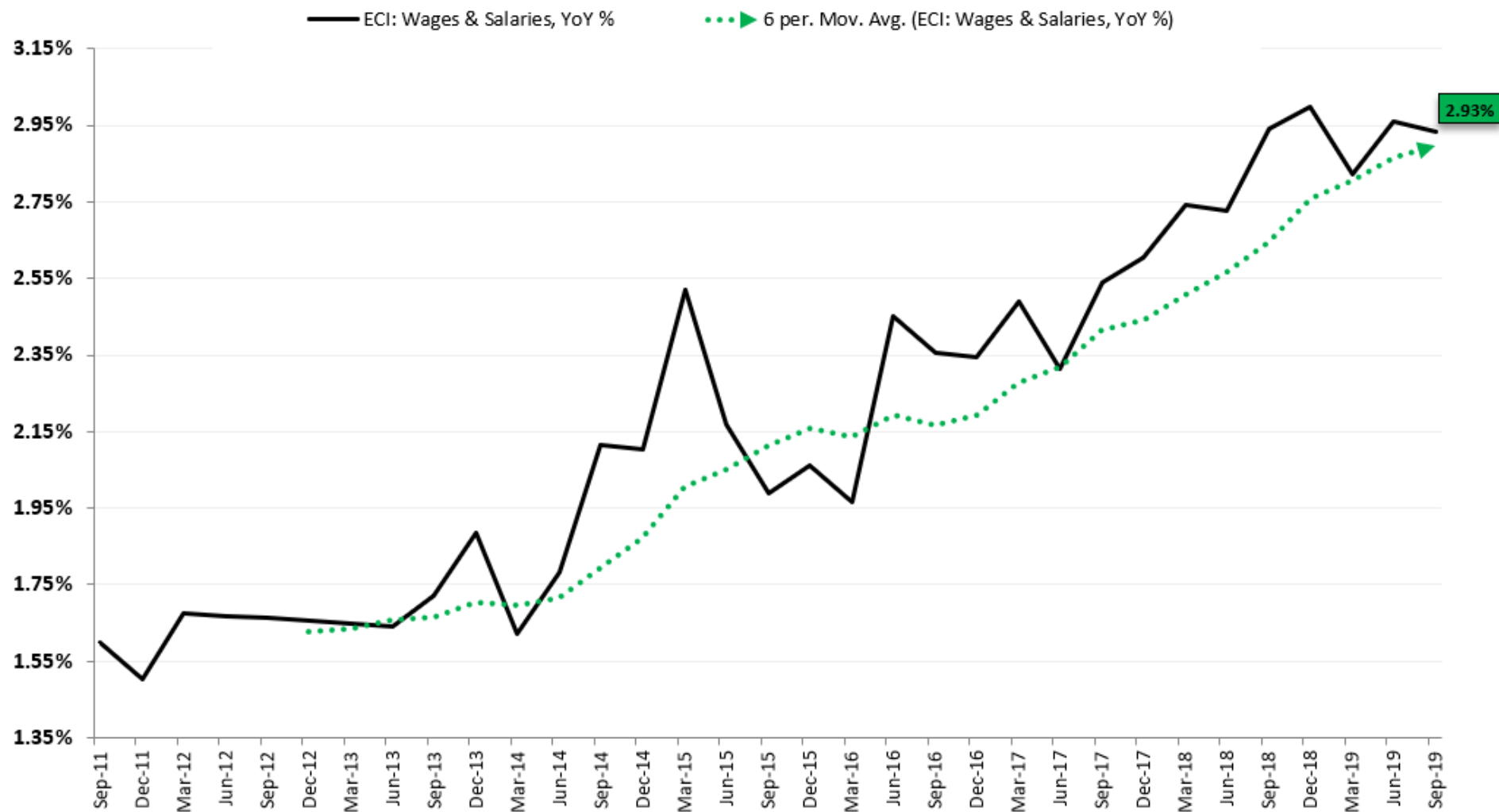
Chicago PMI



Employment Cost Index



Employment Cost Index: Wages & Salaries



GDP: Consumer Spending in Context

	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
Real GDP, Chained \$'s	18,733	-	-	18,784	-	-	18,927	-	-	19,022	-	-	19,113
Consumer Spending (Nominal PCE)	14,138	14,221	14,266	14,149	14,228	14,217	14,355	14,453	14,516	14,565	14,640	14,672	14,696
Consumer Spending (Real PCE)	13,032	13,082	13,116	13,001	13,085	13,063	13,162	13,211	13,256	13,283	13,319	13,345	13,368
Services	8,443	8,470	8,467	8,451	8,468	8,480	8,502	8,525	8,544	8,555	8,567	8,579	8,585
Goods	4,617	4,642	4,683	4,571	4,647	4,607	4,693	4,722	4,750	4,768	4,801	4,819	-
Durable Goods	1,705	1,710	1,732	1,674	1,699	1,681	1,739	1,743	1,767	1,768	1,781	1,792	1,802
NonDurable Goods	2,924	2,944	2,965	2,908	2,959	2,937	2,968	2,991	2,998	3,015	3,028	3,033	3,042
PCE Deflator, MoM	0.1%	0.2%	0.1%	0.0%	-0.1%	0.1%	0.2%	0.3%	0.1%	0.1%	0.2%	0.0%	0.0%
PCE Deflator, YoY	2.0%	2.0%	1.9%	1.8%	1.4%	1.3%	1.4%	1.5%	1.4%	1.4%	1.4%	1.4%	1.3%
Consumer Spending, % of GDP	69.6%	-	-	69.2%	-	-	69.5%	-	-	69.8%	-	-	69.9%

CONSUMER SPENDING

Consumer Spending, Real	13,032	13,082	13,116	13,001	13,085	13,063	13,162	13,211	13,256	13,283	13,319	13,345	13,368
M/M, % Chg	0.0%	0.4%	0.3%	-0.9%	0.6%	-0.2%	0.76%	0.37%	0.34%	0.21%	0.27%	0.20%	0.17%
Y/Y, % Chg	3.1%	3.2%	3.0%	1.7%	2.4%	2.3%	2.8%	2.7%	2.6%	2.6%	2.5%	2.4%	2.6%
2Y Ave	2.8%	3.0%	3.0%	2.4%	2.7%	2.6%	2.7%	2.8%	3.0%	2.9%	3.0%	3.1%	2.8%
QoQ Annualized, %	3.4%			1.4%			1.1%			4.5%			2.8%
Services	8,443	8,470	8,467	8,451	8,468	8,480	8,502	8,525	8,544	8,555	8,567	8,579	8,585
M/M, % Chg	0.0%	0.3%	0.0%	-0.2%	0.2%	0.1%	0.3%	0.3%	0.2%	0.1%	0.1%	0.1%	0.1%
Y/Y, % Chg	2.8%	2.9%	2.6%	2.0%	2.2%	2.4%	2.3%	2.2%	2.3%	1.9%	1.8%	1.6%	1.7%
2Y Ave	2.3%	2.4%	2.2%	2.1%	2.1%	2.2%	2.1%	2.3%	2.3%	2.4%	2.4%	2.4%	2.3%
NonDurable Goods	2,924	2,944	2,965	2,908	2,959	2,937	2,968	2,991	2,998	3,015	3,028	3,033	3,042
M/M, % Chg	-0.2%	0.7%	0.7%	-1.9%	1.8%	-0.8%	1.1%	0.8%	0.2%	0.6%	0.4%	0.2%	0.3%
Y/Y, % Chg	2.8%	3.3%	3.4%	0.8%	3.0%	2.4%	3.3%	3.7%	2.8%	3.9%	3.5%	3.5%	4.0%
2Y Ave	2.9%	3.3%	3.6%	2.4%	3.2%	2.7%	3.0%	3.1%	3.3%	3.3%	3.7%	3.5%	3.4%
Durable Goods	1,705	1,710	1,732	1,674	1,699	1,681	1,739	1,743	1,767	1,768	1,781	1,792	1,802
M/M, % Chg	0.0%	0.3%	1.3%	-3.3%	1.5%	-1.0%	3.5%	0.2%	1.4%	0.0%	0.8%	0.6%	0.6%
Y/Y, % Chg	5.2%	5.0%	5.1%	1.1%	3.0%	1.7%	5.0%	4.1%	4.5%	4.6%	5.4%	5.2%	5.7%
2Y Ave	6.1%	6.1%	7.1%	4.1%	5.2%	4.6%	6.2%	5.8%	6.3%	5.8%	5.9%	6.5%	5.4%

PERSONAL INCOME, SAAR Bil \$'s

Personal Income	17,955	18,007	18,036	18,205	18,257	18,364	18,446	18,528	18,595	18,676	18,697	18,785	18,835
Disposable Personal Income (DPI)	15,870	15,932	15,963	16,122	16,118	16,204	16,274	16,335	16,386	16,453	16,493	16,585	16,641
DPI (Real, Per Capita)	44,612	44,671	44,709	45,112	45,120	45,300	45,380	45,389	45,462	45,567	45,538	45,755	45,884
Private, Salaries & Wages	7,543	7,552	7,558	7,590	7,701	7,781	7,856	7,858	7,867	7,907	7,922	7,970	7,971
Government, Salaries & Wages	1,418	1,420	1,423	1,426	1,429	1,432	1,434	1,438	1,441	1,448	1,454	1,457	1,460
Savings, % of Disposable Income	7.5	7.3	7.2	8.8	8.3	8.8	8.4	8.1	8.0	8.1	7.8	8.1	8.3

PERSONAL INCOME, YoY %

Personal Income	5.4%	5.1%	4.7%	5.0%	4.5%	4.7%	4.7%	4.9%	4.9%	4.9%	4.6%	4.6%	4.9%
Disposable Personal Income (DPI)	6.1%	6.0%	5.7%	6.1%	4.7%	4.8%	4.7%	4.8%	4.7%	4.6%	4.4%	4.6%	4.9%
DPI (Real, Per Capita)	3.3%	3.2%	3.0%	3.6%	2.6%	2.8%	2.7%	2.6%	2.6%	2.6%	2.3%	2.5%	2.9%
Private, Salaries & Wages	5.0%	4.6%	3.9%	3.6%	4.3%	5.3%	6.0%	5.7%	5.7%	5.9%	5.6%	5.7%	5.7%
Government, Salaries & Wages	4.5%	4.3%	4.1%	4.0%	3.9%	3.7%	3.6%	3.6%	3.4%	3.5%	3.3%	3.1%	2.9%

PERSONAL INCOME, 2Y Ave

Personal Income	5.2%	5.1%	5.1%	5.4%	5.1%	5.2%	5.2%	5.3%	5.3%	5.5%	5.4%	5.4%	5.2%
Disposable Personal Income (DPI)	5.5%	5.5%	5.5%	5.8%	5.3%	5.3%	5.3%	5.5%	5.4%	5.6%	5.5%	5.6%	5.5%
DPI (Real, Per Capita)	2.9%	2.9%	2.9%	3.3%	-	-	-	-	-	-	-	-	-
Private, Salaries & Wages	5.1%	4.9%	4.8%	4.8%	5.2%	5.6%	6.0%	5.7%	5.6%	5.6%	5.5%	5.7%	5.3%
Government, Salaries & Wages	3.8%	3.8%	3.8%	3.8%	3.8%	3.7%	3.7%	3.7%	3.7%	3.8%	3.8%	3.8%	3.7%

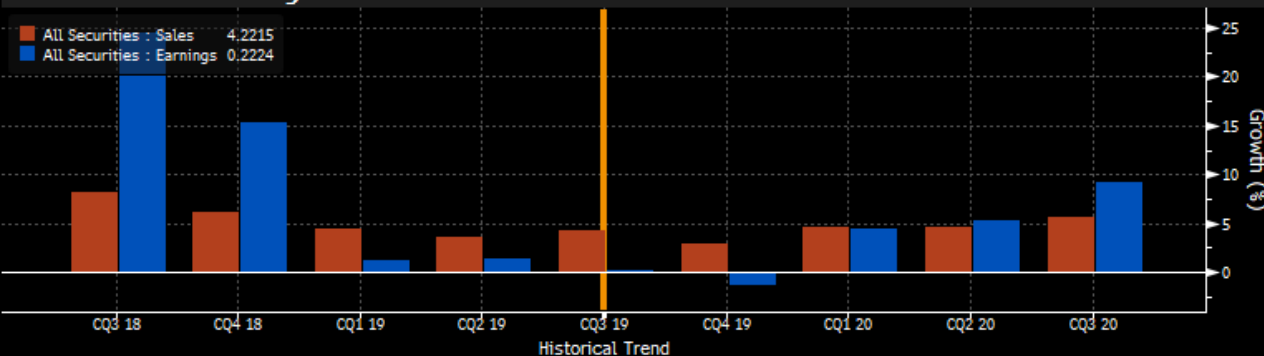
S&P 500 Sales & Earnings Growth

S&P 500 INDEX

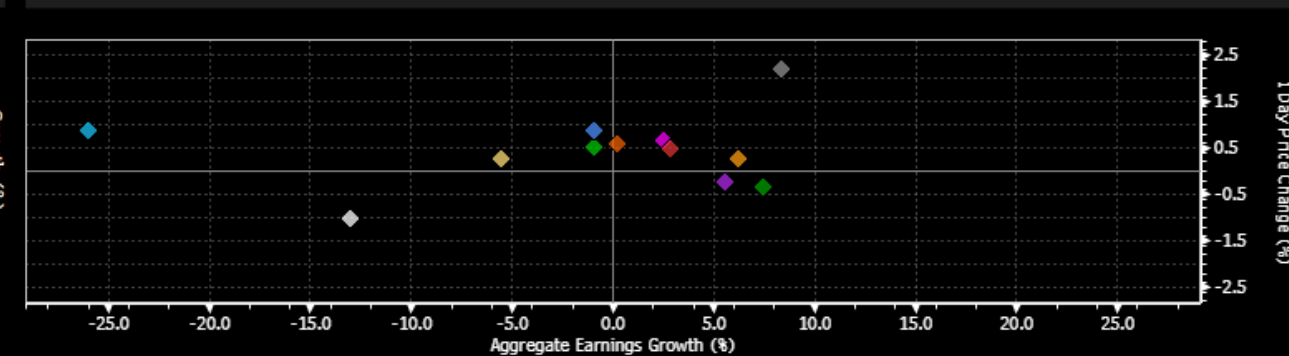
Range CQ3 Ending: 8/16/2019 - 11/15/2019

Surprise	Growth				
Sector (GICS)	Reported	Sales Growth	Earnings Growth		
11) All Securities	347 / 499	4.22%	0.22%		
12) > Energy	18 / 28	-1.75%	-13.03%		
13) > Materials	17 / 27	-25.84%	-26.03%		
14) > Industrials	58 / 69	-0.21%	2.51%		
15) > Consumer Discretionary	34 / 63	8.73%	-0.97%		
16) > Consumer Staples	22 / 33	4.44%	2.83%		
17) > Health Care	41 / 61	15.94%	8.31%		
18) > Financials	61 / 67	3.97%	-0.98%		
19) > Information Technology	43 / 68	1.74%	-5.57%		
20) > Communication Services	12 / 23	9.06%	5.53%		
21) > Utilities	12 / 28	-1.33%	6.17%		
22) > Real Estate	29 / 32	3.60%	7.42%		

Historical Analysis



Price Reaction

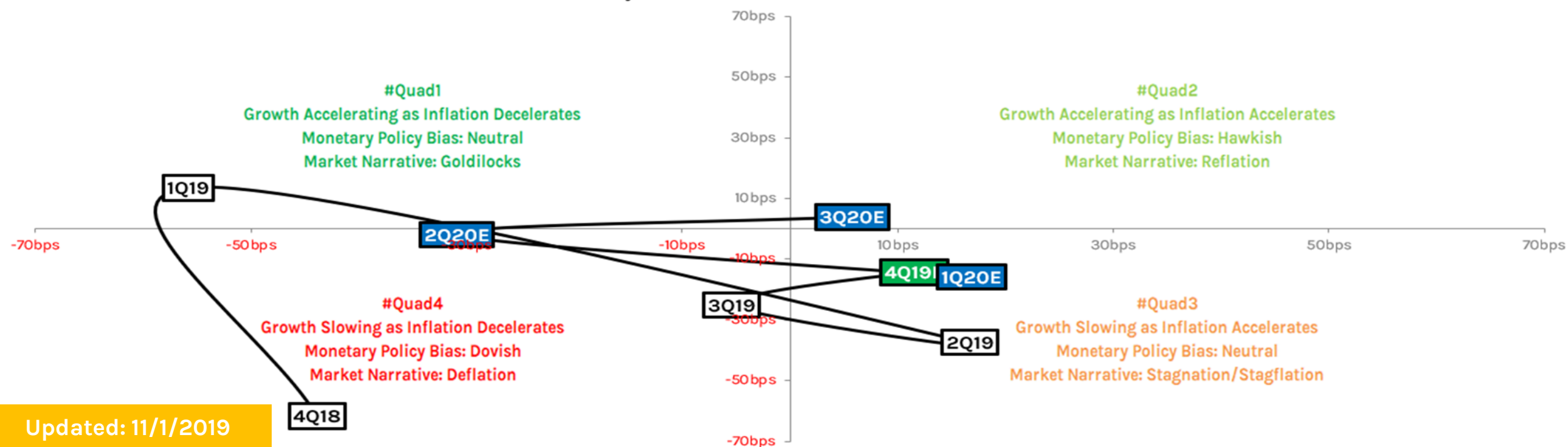


Our Research Process is REPEATABLE

United States	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	← Actuals Estimates →	4Q19E	1Q20E	2Q20E	3Q20E
Real GDP QoQ SAAR	2.00%	2.30%	2.20%	3.20%	3.50%	2.50%	3.50%	2.90%	1.10%	3.10%	2.00%	1.90%	Hedgeye Estimates	0.52%	2.43%	1.92%	2.06%
Sequential Hurdle Rate	0.03%	0.50%	0.48%	0.55%	0.50%	0.58%	0.55%	0.80%	0.88%	0.63%	0.88%	0.73%	Sequential Hurdle Rate	0.28%	0.78%	0.50%	0.48%
Real GDP YoY	2.03%	2.10%	2.16%	2.42%	2.80%	2.86%	3.20%	3.13%	2.52%	2.65%	2.28%	2.03%	Hedgeye Estimates	1.89%	1.73%	1.71%	1.75%
2Y Comparative Base Effects	2.39%	2.80%	2.35%	2.00%	1.97%	1.86%	1.75%	1.99%	2.41%	2.48%	2.68%	2.77%	2Y Comparative Base Effects	2.66%	2.76%	2.74%	2.58%
Headline CPI YoY	1.80%	2.54%	1.90%	1.97%	2.12%	2.21%	2.71%	2.64%	2.20%	1.64%	1.81%	1.76%	Headline CPI YoY	1.87%	2.04%	1.73%	1.79%
2Y Comparative Base Effects	0.86%	0.51%	0.50%	0.61%	1.13%	1.81%	1.48%	1.54%	1.96%	2.38%	2.31%	2.30%	2Y Comparative Base Effects	2.16%	1.93%	2.26%	2.20%

United States

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



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

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Our Asset Allocation Process Is RULES-BASED

#QUAD1

Goldilocks. Maximum gross exposure, wide net exposure.

Asset Class Overweight(s): Equities, Credit

Asset Class Underweight(s): Fixed Income, USD

Equity Sector Overweight(s): Tech, Consumer Discretionary, Industrials, Materials

Equity Sector Underweight(s): Utilities, Consumer Staples, Energy, Health Care

Equity Style Factor Overweight(s): High Beta, Cyclical, Momentum

Equity Style Factor Underweight(s): Low Beta, Defensives, Dividend Yield

Fixed Income Overweight(s): Convertibles, High Yield Credit, Leveraged Loans, BDCs

Fixed Income Underweight(s): TIPS, Short Duration Treasuries, MBS, Medium Duration Treasuries

#QUAD2

Reflation. Maximum gross exposure, wide net exposure.

Asset Class Overweight(s): Equities, Credit, Commodities

Asset Class Underweight(s): Fixed Income, USD

Equity Sector Overweight(s): Tech, Consumer Discretionary, Industrials, Energy

Equity Sector Underweight(s): Telecom, Utilities, Consumer Staples, REITS

Equity Style Factor Overweight(s): Momentum, Growth, Small Caps

Equity Style Factor Underweight(s): Low Beta, Value, Dividend Yield

Fixed Income Overweight(s): BDCs, Convertibles, Preferreds, Leveraged Loans

Fixed Income Underweight(s): Long Duration Treasuries, Munis, Investment Grade Credit, Medium Duration Treasuries

#QUAD3

Stagnation-to-stagflation. Moderate gross exposure, tight net exposure.

Asset Class Overweight(s): Fixed Income, Commodities

Asset Class Underweight(s): Equities, Credit

Equity Sector Overweight(s): Utilities, Tech, Energy, REITS

Equity Sector Underweight(s): Financials, Materials, Telecom, Consumer Staples

Equity Style Factor Overweight(s): High Beta, Quality, Large Cap Growth

Equity Style Factor Underweight(s): Dividend Yield, Small Caps, Value

Fixed Income Overweight(s): Munis, Long Duration Treasuries, TIPS, Investment Grade Credit

Fixed Income Underweight(s): BDCs, Preferreds, Convertibles, Leveraged Loans

#QUAD4

Deflation. Minimum gross exposure, market neutral exposure.

Asset Class Overweight(s): Fixed Income, USD

Asset Class Underweight(s): Equities, Credit, Commodities

Equity Sector Overweight(s): Consumer Staples, Health Care, REITS, Utilities

Equity Sector Underweight(s): Tech, Energy, Industrials, Financials

Equity Style Factor Overweight(s): Low Beta, Dividend Yield, Defensives

Equity Style Factor Underweight(s): Momentum, High Beta, Growth

Fixed Income Overweight(s): Long Duration Treasuries, Medium Duration Treasuries, Munis, MBS

Fixed Income Underweight(s): Convertibles, TIPS, Leveraged Loans, High Yield Credit

Sector Performance

<u>SECTOR</u>	<u>Ticker</u>	<u>Price</u>	<u>1-Day % Chg</u>	<u>MTD % Chg</u>	<u>QTD % Chg</u>	<u>YTD % Chg</u>
Consumer Discretionary	XLY	\$120.85	-0.53%	0.12%	0.12%	22.06%
Financial Select Sector	XLF	\$28.70	-0.49%	2.50%	2.50%	20.49%
Health Care Select Sector	XLV	\$94.75	-0.12%	5.13%	5.13%	9.52%
Technology Select Sector	XLK	\$83.67	-0.06%	3.90%	3.90%	35.00%
Consumer Staples Select Sector	XLP	\$61.16	-0.15%	-0.42%	-0.42%	20.44%
Industrial Select Sector	XLI	\$78.51	-1.07%	1.13%	1.13%	21.89%
Materials Select Sector	XLB	\$58.19	-1.12%	-0.02%	-0.02%	15.18%
The Energy Select Sector	XLE	\$57.96	-0.43%	-2.09%	-2.09%	1.06%
Utilities Select Sector	XLU	\$64.25	0.55%	-0.76%	-0.76%	21.41%
Real Estate Select Sector	XLRE	\$39.33	-0.33%	-0.03%	-0.03%	26.87%
Communications Services Sector	XLC	\$50.62	0.30%	2.22%	2.22%	22.63%
S&P 500	SPX	3,037.56	-0.30%	2.04%	2.04%	21.17%

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	\$120.85	-0.23%	-1.92%	-1.92%	0.89%
Financial Select Sector	XLF	\$28.70	-0.18%	0.46%	0.46%	-0.68%
Health Care Select Sector	XLV	\$94.75	0.19%	3.08%	3.08%	-11.65%
Technology Select Sector	XLK	\$83.67	0.24%	1.86%	1.86%	13.82%
Consumer Staples Select Sector	XLP	\$61.16	0.16%	-2.47%	-2.47%	-0.73%
Industrial Select Sector	XLI	\$78.51	-0.77%	-0.91%	-0.91%	0.72%
Materials Select Sector	XLB	\$58.19	-0.82%	-2.06%	-2.06%	-5.99%
The Energy Select Sector	XLE	\$57.96	-0.13%	-4.14%	-4.14%	-20.11%
Utilities Select Sector	XLU	\$64.25	0.85%	-2.80%	-2.80%	0.24%
Real Estate Select Sector	XLRE	\$39.33	-0.03%	-2.07%	-2.07%	5.70%
Communications Services Sector	XLC	\$50.62	0.60%	0.18%	0.18%	1.46%

Market Share Volume & Total Value Traded

<u>INDEX/SECURITY</u>	VOLUME: (10/31) vs.			
	<u>Prior Day</u>	<u>1M Ave</u>	<u>3M ave</u>	<u>1Y Ave</u>
Total Market Volume*	2%	10%	3%	-10%
<hr/>				
Total Exchange Volume**	13%	19%	12%	7%

*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	-0.4%	-0.3%	0.2%	0.4%	-0.3%	17.6%
	Low Debt/EV	-0.5%	0.6%	2.1%	0.1%	0.1%	20.9%
SI	High Short Interest	-0.6%	0.0%	1.8%	-0.6%	-4.5%	12.2%
	Low Short Interest	-0.4%	0.8%	0.8%	0.3%	3.7%	24.5%
BETA	High Beta	-0.9%	0.3%	2.4%	-2.2%	-6.5%	14.0%
	Low Beta	-0.2%	-0.5%	-0.7%	4.4%	7.9%	23.5%
YIELD	High Yield	-0.6%	-0.7%	-0.4%	-0.6%	-2.7%	10.0%
	Low Yield	-0.3%	1.1%	3.0%	0.3%	1.3%	25.0%
MKT CAP	MCAP Bottom 25%	-0.7%	-0.2%	0.3%	-2.3%	-6.0%	9.3%
	MCAP Top 25%	-0.4%	1.3%	2.8%	3.4%	6.3%	23.9%
Sales	Top 25% Sales Growth	-0.3%	0.9%	2.6%	0.8%	2.5%	25.8%
	Bottom 25% Sales Growth	-0.5%	0.2%	1.4%	0.1%	-2.3%	12.4%
EPS	Top 25% EPS Growth	-0.7%	0.5%	1.7%	0.4%	1.3%	24.7%
	Bottom 25% EPS Growth	-0.5%	-0.6%	-0.5%	-1.6%	-3.2%	9.6%

**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	1.52%	-4.9	-13.7	-28	-54	-95	0	-7	51
3M LIBOR	1.91%	0.0	-2.7	-18	-36	-91	0	0	57
2Y T-Note	1.52%	-7.4	-5.4	-10	-35	-145	17	-41	8
5Y T-Note	1.52%	-8.7	-6.4	-2	-31	-158	21	-69	-37
10Y T-Note	1.69%	-8.1	-7.5	3	-32	-156	26	-79	-59
30Y T-Note	2.18%	-7.3	-8.3	7	-35	-129	28	-72	-65
2Y-10Y Spread, Bps	16.71	-0.7	-2.1	12.4	2	-11	10	-39	-67
IG SPREAD (AAABBB)	1.38%	0.0	1.0	-9	-2	-51	3	-11	-24
HIGH YIELD	5.61%	0.0	5.0	-4	-27	-251	18	-50	-89
5Y BREAK EVEN	1.45%	-3.7	-8.7	10.3	-9.8	-48.6	20.1	-36.1	-19.5

Key \$USD Correlations

METRIC	15D	30D	90D	120D	180D	52-Wk Rolling 30D Correlation			
						High	Low	% Time Pos	% Time Neg
SPX	-0.49	-0.75	-0.23	0.04	0.35	0.77	-0.75	54%	46%
BRENT Oil	-0.17	-0.14	-0.30	-0.13	-0.22	0.71	-0.59	52%	48%
CRB Index	0.00	-0.77	-0.73	-0.13	-0.66	0.71	-0.77	36%	64%
GOLD	-0.27	0.10	0.60	0.46	0.54	0.42	-0.91	27%	73%

*Days = Trading Days

CFTC Non-Commercial Net Long Positioning

CFTC NON-COMMERCIAL NET LONG POSITIONING

	METRIC	Latest	W/W Chg	3M Ave	6M Ave	1Y Ave	3Y		Z-Score	
							Max	Min	1Y	3Y
EQUITIES	SPX (Index + E-mini)	33,578	7,029	33,624	51,783	48,289	249,638	(128,189)	-0.17X	-0.69X
	VIX	(171,236)	(15,256)	(112,916)	(116,612)	(79,701)	92,913	(180,359)	-1.34X	-1.33X
	Russell 2000 (mini)	(25,302)	7,296	(47,948)	(46,199)	(46,286)	157,711	(150,738)	0.63X	-0.34X
	Dow Jones (mini)	39,783	1,368	41,728	33,423	27,555	95,976	(282)	1.03X	-0.15X
	Nasdaq (mini)	31,525	(2,120)	27,572	21,499	8,200	132,006	(24,815)	1.34X	0.00X
	Nikkei Index	(10,086)	82	(8,018)	(9,453)	(9,963)	14,214	(16,298)	-0.03X	-1.12X
RATES	10Y UST	(123,612)	(9,597)	(278,755)	(312,573)	(264,319)	372,991	(758,490)	1.31X	0.24X
	2Y UST	(250,235)	4,822	(230,642)	(194,166)	(227,442)	86,881	(421,551)	-0.21X	-0.84X
	5Y UST	(191,780)	(23,991)	(104,167)	(95,534)	(166,279)	6,400	(866,140)	-0.19X	0.56X
	UST Bonds	(55,929)	5,347	(55,303)	(42,163)	(43,253)	122,839	(142,810)	-0.68X	-0.95X
	30D Fed Funds	220,688	26,291	57,205	(26,455)	(67,070)	220,688	(286,025)	2.51X	2.33X
	Eurodollar	1,476,754	151,103	1,229,698	899,695	(101,859)	1,492,553	(3,110,209)	1.36X	2.35X
CURRENCIES	\$USD	31,210	(6,225)	34,604	30,560	32,094	56,635	(10,666)	-0.17X	0.40X
	JPY	(18,492)	(12,319)	13,830	(13,314)	(43,342)	40,430	(140,151)	0.56X	0.90X
	EUR	(52,422)	26,336	(62,543)	(68,626)	(66,504)	147,318	(143,673)	0.59X	-0.71X
	GBP	(54,973)	21,072	(85,725)	(64,866)	(49,972)	49,216	(113,271)	-0.17X	-0.47X
	AUD	(46,551)	2,974	(53,150)	(56,204)	(51,115)	77,969	(74,181)	0.44X	-0.83X
	CAD	33,290	20,948	14,095	(3,826)	(19,556)	78,001	(99,736)	1.84X	1.06X
	MXN	113,760	106	107,644	118,122	91,758	156,013	(73,499)	0.46X	0.98X
	NZD	(40,258)	(313)	(29,161)	(23,185)	(14,807)	35,981	(42,544)	-1.88X	-1.95X
COMMODITIES	CHF	(11,629)	1,483	(9,721)	(17,647)	(20,253)	6,572	(47,216)	0.87X	0.61X
	CRUDE OIL	392,752	3,937	422,220	445,450	428,663	784,290	327,706	-0.60X	-1.01X
	GOLD	225,930	6,177	260,787	197,443	112,897	292,066	(103,009)	1.00X	1.29X
	COPPER	(40,532)	6,009	(46,933)	(35,473)	(16,942)	67,602	(60,135)	-0.99X	-1.84X
	Natural Gas	(211,848)	(24,915)	(172,907)	(147,935)	(78,876)	57,455	(216,003)	-1.68X	-2.42X
	RBOB Gasoline	63,079	3,088	59,843	71,732	78,561	114,862	29,519	-1.18X	-0.75X
	ULSD Heating Oil	(1,974)	4,856	(2,271)	(8,379)	(6,437)	67,696	(25,442)	0.40X	-0.96X
	Silver	49,777	3,106	57,864	33,897	28,780	107,003	(30,158)	0.74X	0.47X
	Platinum	35,177	1,998	29,145	21,535	19,270	45,610	(11,540)	1.47X	1.14X
	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	(58,128)	(11,171)	(411)	49,593	23,658	372,754	(270,560)	-0.51X	-0.65X
	Soybeans	83,107	13,829	(7,522)	(37,212)	(31,339)	210,365	(148,817)	2.39X	0.67X
	Wheat	19,397	23,722	7,868	4,113	(11,578)	63,219	(143,292)	1.01X	1.08X
	Live Cattle	52,261	7,859	37,837	62,609	96,766	183,134	19,421	-0.92X	-1.13X
	Lean Hogs	51,649	(9,039)	60,107	69,917	53,207	97,769	(11,151)	-0.06X	0.27X
	Sugar	(203,643)	(34,529)	(151,924)	(112,235)	(60,167)	284,344	(203,643)	-1.98X	-1.82X
	Cotton	5,395	8,750	(21,641)	(19,236)	2,220	132,318	(37,827)	0.11X	-1.12X
	Coffee	(50,621)	2,365	(35,037)	(33,530)	(42,417)	67,942	(106,651)	-0.43X	-0.56X
	Cocoa	31,350	43	10,281	20,476	10,256	61,244	(43,846)	0.94X	1.01X
	Orange Juice	(5,997)	(81)	(6,377)	(6,688)	(7,062)	9,001	(9,416)	0.95X	-0.88X

HEDGEYE TV

The Macro Show
November 1, 2019

Volatility

TIME WINDOW SETTING:		TICKER	TOTAL RETURN	IVOL PREMIUM/DISCOUNT						REALIZED VOLATILITY TRENDS			IMPLIED VOLATILITY TRENDS				
VOLATILITY_30D			PERFORMANCE	IVOL PREM %		Yesterday	1W Ago	1M Ago	TTM Z-Score	3Yr Z-Score	RVOL		PERCENTILE	IVOL		PERCENTILE	
PUT_IMP_VOL_30D			YTD %	IVOL / RVOL							CURRENT	MM %	10YR	CURRENT	MM %	10YR	
US EQUITIES															CURRENT		
Technology Sector SPDR ETF	XLK US EQUITY	36.34%	-16%	-13%	39%	12%	-0.5	-0.8	17.6	-5%	70%	14.8	-29%	44%			
Vanguard Real Estate REIT ETF	VNQ US EQUITY	29.60%	23%	32%	26%	17%	1.0	1.1	8.8	-22%	5%	10.8	-18%	10%			
Power Shares QQQ Trust ETF	QQQ US EQUITY	28.53%	-4%	-1%	11%	13%	-0.2	-0.5	15.3	-10%	56%	14.7	-24%	38%			
Utilities Sector SPDR ETF	XLU US EQUITY	24.23%	1%	-2%	15%	24%	-0.3	-0.3	10.7	2%	28%	10.8	-17%	14%			
Industrials Sector SPDR ETF	XLI US EQUITY	23.79%	-6%	-14%	1%	16%	-0.2	-0.6	15.0	0%	54%	14.0	-20%	35%			
Communication Services SPDR ETF	XLC US EQUITY	23.43%	2%	4%	18%	17%	-0.1		15.9	-2%	31%	16.3	-14%	15%			
Consumer Discretionary Sector SPDR ETF	XLY US EQUITY	23.31%	2%	-7%	52%	-5%	0.0	-0.4	11.8	-28%	32%	12.0	-23%	16%			
SPDR S&P 500 ETF Trust	SPY US EQUITY	23.06%	-11%	-19%	-5%	17%	-0.3	-0.7	12.3	-5%	50%	10.9	-28%	26%			
Consumer Staples Sector SPDR ETF	XLP US EQUITY	22.75%	263%	-7%	-14%	37%	4.6	6.3	10.5	-3%	46%	38.1	157%	100%			
Financials Sector SPDR ETF	XLF US EQUITY	22.34%	-10%	-10%	-8%	13%	-0.5	-0.7	15.9	1%	48%	14.3	-19%	20%			
I-Shares Russell 2000 ETF	IWM US EQUITY	17.23%	0%	-1%	6%	0%	0.2	-0.3	14.8	-23%	39%	14.8	-23%	21%			
Materials Sector SPDR ETF	XLB US EQUITY	16.96%	-5%	4%	-5%	21%	-0.3	-0.5	15.3	5%	41%	14.5	-18%	28%			
Health Care Sector SPDR ETF	XLV US EQUITY	10.85%	-14%	-18%	-5%	77%	-0.5	-0.9	14.3	18%	59%	12.3	-43%	28%			
Energy Sector SPDR ETF	XLE US EQUITY	3.72%	-5%	-2%	-13%	3%	-0.3	-0.5	18.9	-9%	53%	17.9	-17%	36%			
INTERNATIONAL EQUITIES																	
Euro Stoxx 50 Index	SX5E INDEX	24.31%	-20%	-21%	-24%	33%	-1.1	-1.1	15.1	47%	38%	12.1	-11%	11%			
I-Shares MSCI Japan ETF	EWJ US EQUITY	16.81%	-3%	-5%	-6%	28%	0.0	-0.5	10.6	7%	16%	10.3	-19%	7%			
I-Shares MSCI Emerging Markets ETF	EEM US EQUITY	9.84%	23%	13%	27%	41%	0.9	0.9	12.0	-4%	8%	14.8	-17%	13%			
I-Shares China Large-Cap ETF	FXI US EQUITY	6.36%	22%	23%	23%	31%	1.1	0.9	13.8	-8%	5%	16.8	-15%	9%			
CURRENCIES																	
PowerShares US Dollar Index ETF	UUP US EQUITY	4.48%	31%	29%	26%	30%	0.0	0.3	4.5	-17%	8%	5.9	-16%	9%			
Currency Shares British Pound ETF	FXB US EQUITY	1.55%	-13%	-18%	-8%	24%	-1.8	-1.3	11.3	20%	91%	9.8	-16%	68%			
Currency Shares Japanese Yen ETF	FXJ US EQUITY	1.04%	4%	15%	14%	5%	-0.2	-0.3	5.1	-19%	6%	5.3	-20%	2%			
Currency Shares Euro Trust ETF	FXE US EQUITY	-3.30%	14%	13%	5%	11%	0.5	0.5	4.2	-22%	4%	4.8	-21%	1%			
COMMODITIES																	
SPDR Gold Shares ETF	GLD US EQUITY	17.47%	-3%	-7%	2%	-11%	-0.2	-0.6	11.9	-24%	36%	11.5	-17%	22%			
United States Oil Fund ETF	USO US EQUITY	16.98%	40%	40%	-26%	-23%	1.9	1.9	22.6	-52%	29%	31.6	-12%	62%			
PowerShares DB Agriculture Fund ETF	DBA US EQUITY	-5.90%	47%	34%	36%	14%	0.8	0.7	8.1	-31%	11%	11.9	-11%	12%			
United States Natural Gas Fund ETF	UNG US EQUITY	-15.78%	48%	40%	82%	33%	1.4	1.7	32.5	-1%	42%	48.2	11%	81%			
FIXED INCOME																	
I-Shares 20+ Year Treasury Bond ETF	TLT US EQUITY	18.37%	-14%	-15%	-6%	-15%	-0.8	-1.1	13.1	-22%	56%	11.3	-21%	33%			
I-Shares IBOX IG Corporate Bond ETF	LOD US EQUITY	16.20%	5%	6%	3%	-11%	-0.2	-0.4	4.9	-31%	50%	5.2	-18%	40%			
I-Shares J.P. Morgan USD EM Bond ETF	EMB US EQUITY	13.25%	4%	-8%	-1%	9%	0.1	-0.5	5.6	-19%	49%	5.8	-23%	25%			
I-Shares IBOX HY Corporate Bond ETF	HYG US EQUITY	11.32%	23%	24%	4%	18%	0.4	0.2	3.8	-4%	18%	4.7	0%	16%			
I-Shares 7-10 Year Treasury Bond ETF	IEF US EQUITY	9.79%	-11%	21%	-6%	6%	-0.5	-0.6	5.8	-13%	57%	5.2	-27%	24%			

Global Data

MACROECONOMIC INDICATOR	QUARTERLY AVERAGE DELTA		TRENDING DELTA		SEQUENTIAL DELTA		PERCENTILE BASIS (T10Y)	RoC	HISTORICAL CONTEXT	
	Sep-19	Dec-19	12MMA	6MMA (OCT)	Prior	Latest (OCT)	Latest Reading	OCT	Best Since	Worst Since
South Korea CPI YoY	0.07	0.00	0.60	0.27	-0.40	0.00	1%	0.40	7/31/2019	9/30/2019
South Korea Core Inflation YoY excluding agriculture and oil price	0.83	0.80	1.00	0.83	0.60	0.80	1%	0.20	8/31/2019	9/30/2019
South Korea Exports YoY	-12.17	-14.70	-8.41	-12.47	-11.70	-14.70	3%	-3.00	9/30/2019	1/31/2016
South Korea Imports YoY	-4.17	-14.60	-3.76	-6.65	-5.60	-14.60	9%	-9.00	9/30/2019	1/31/2016
Australia PPI Finished Goods YoY	2.00	1.60	1.88	1.80	2.00	1.60	46%	-0.40	6/30/2019	6/30/2018
Markit Taiwan Manufacturing PMI SA	48.67	49.80	48.07	48.28	50.00	49.80	31%	-0.20	9/30/2019	8/31/2019
Jibun Bank Japan Manufacturing PMI SA	49.20	48.40	49.88	49.18	48.90	48.40	0%	-0.50	9/30/2019	1/0/1900
Markit South Korea Manufacturing PMI SA	48.10	48.40	48.46	48.10	48.00	48.40	20%	0.40	8/31/2019	9/30/2019
Markit Indonesia Manufacturing PMI SA	49.23	47.70	50.07	49.60	49.10	47.70	0%	-1.40	9/30/2019	1/0/1900
Caixin China Manufacturing PMI SA	50.57	51.70	50.18	50.50	51.40	51.70	94%	0.30	12/31/2016	9/30/2019
Indonesia CPI YoY	3.40	3.13	3.08	3.32	3.39	3.13	9%	-0.26	9/30/2019	4/30/2019
Indonesia Headline CPI - Core Inflation YoY 2012=100	3.27	3.20	3.14	3.23	3.32	3.20	24%	-0.12	9/30/2019	7/31/2019
Markit India Manufacturing PMI SA	51.77	50.60	52.54	51.78	51.40	50.60	11%	-0.80	9/30/2019	10/31/2017
Markit Russia Manufacturing PMI SA	48.23	47.20	50.02	48.38	46.30	47.20	3%	0.90	8/31/2019	9/30/2019
Markit Turkey Manufacturing PMI SA	48.23	49.00	46.70	47.82	50.00	49.00	54%	-1.00	9/30/2019	8/31/2019