

THE  
MACRO  
SHOW



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1

**FRENCH  
DATA**



2

**SOUTH  
KOREA**



3

**ECB**



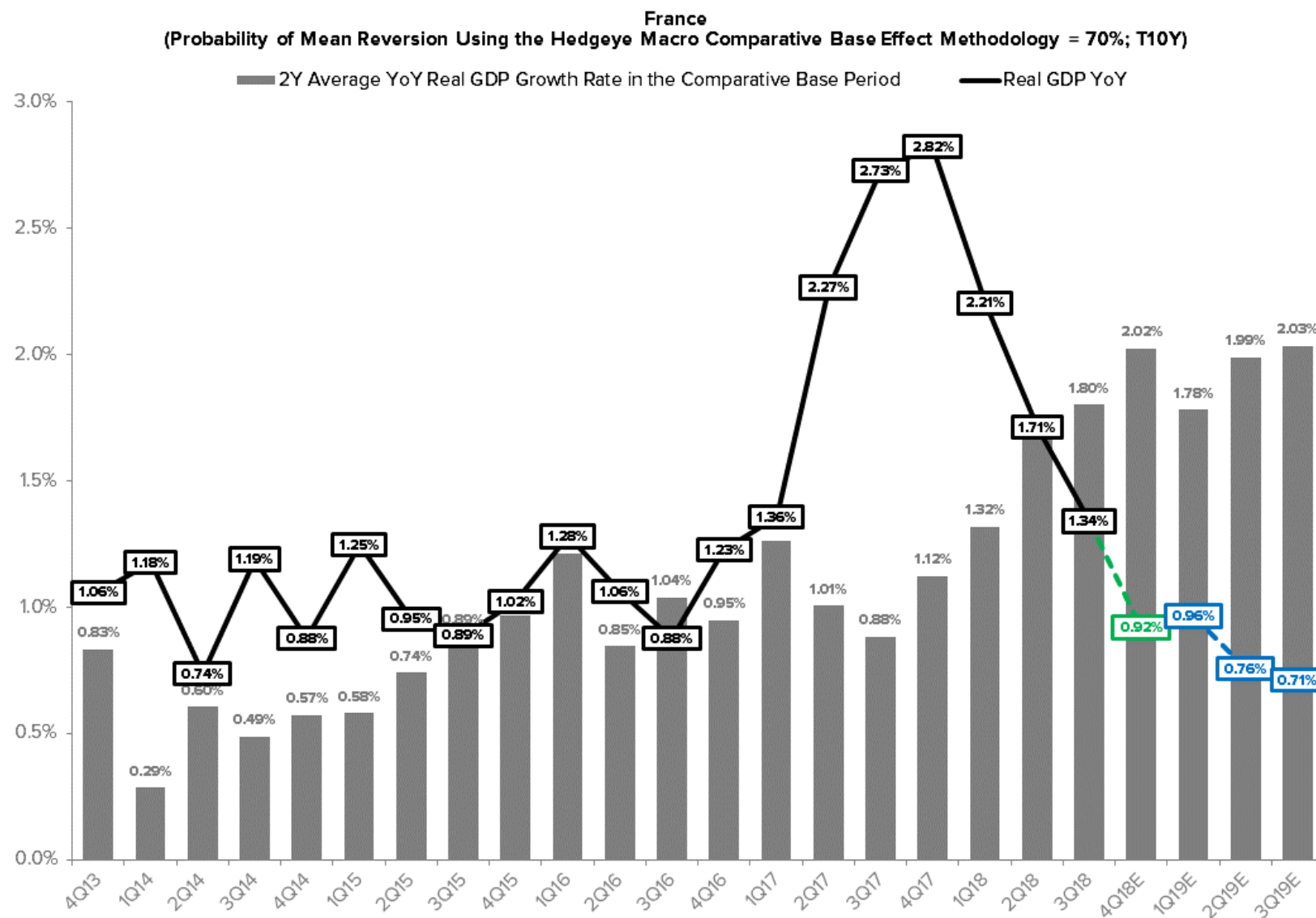


# 1 FRENCH DATA

French data is burning. Macro Tourists will cite the Yellow Shirt movement as the causal factor for France's GDP slowdown in 4Q18 – which our model missed by a mere 1bps (Hedgeye nowcast of 0.93% YoY vs. 0.92% YoY actual vs. ); we'll just blame the comps. Additionally, French consumer spending ended 2018 on its cycle-lows of -2.3% YoY, calling incremental attention to our “rising European recession risk” view. The CAC is bouncing (up +4.8% YTD) like a lot of global equity markets, but it remains well south of TREND resistance. A failure there would be indicative of that view.



# France



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



## 2 SOUTH KOREA

The KOSPI enjoyed a conspicuous bounce overnight, up over +1% to +8% YTD, in spite of bad economic data (FEB Manufacturing Survey: 65 vs. 71 prior). This remains a key EM to watch, as South Korea has among the world's most positive GIP Model outlooks, with back-to-back Quad 1's to start the 2019E. Alongside global Semiconductor stocks, the KOSPI has bounced all the way to TREND resistance, so a decisive break above these levels would be a signal to us that South Korean equities are now a buy-on-dips, rather than the sell-on-rips market it's been since the middle of 2018. Chasing today is precarious though, given our dour outlook for global growth.



# Hedgeye Macro GIP Model Signals

1/30/2019	Hedgeye Macro GIP Model Signals													High-Frequency Economic Data Signals									
	Actuals									Hedgeye Forecasts				Consumption		Manufacturing		Composite PMI		Headline CPI		Core CPI	
	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18E	1Q19E	2Q19E	3Q19E	3MMA Trend	Percentile of Latest Reading (T10Y)	3MMA Trend	Percentile of Latest Reading (T10Y)	3MMA Trend	Percentile of Latest Reading (T10Y)	3MMA Trend	Percentile of Latest Reading (T10Y)	3MMA Trend	Percentile of Latest Reading (T10Y)
Argentina	-	-	-	-	-	-	3	3	2	3	4	1	4	📉	31%	-	-	-	-	📈	92%	-	-
Australia	3	2	3	4	1	3	2	2	4	4	4	-	3	📉	26%	👉	26%	📈	13%	📉	28%	👉	9%
Brazil	1	1	1	1	1	2	4	3	2	1	3	3	4	📈	52%	📈	89%	📈	97%	📉	11%	📉	6%
Canada	1	2	2	1	3	3	3	3	2	4	1	3	1	📉	11%	📉	37%	📉	37%	📉	67%	📈	98%
China	1	2	1	4	3	3	3	4	3	4	3	2	1	📈	8%	📉	4%	📉	0%	📉	39%	📈	65%
Eurozone	2	2	2	1	1	4	4	3	3	4	1	4	1	📉	56%	📉	3%	📉	0%	📉	60%	📈	40%
France	3	2	2	1	1	2	3	3	3	4	1	4	4	👉	1%	📉	17%	📉	0%	📉	73%	📉	9%
Germany	2	3	2	1	2	1	4	3	3	3	1	1	1	👉	58%	📉	6%	📉	0%	📉	63%	📈	78%
India	4	4	4	4	2	2	2	2	4	1	3	2	2	-	-	📈	91%	📈	86%	📉	2%	-	-
Indonesia	4	3	2	2	1	1	4	1	4	3	1	4	2	📈	31%	📈	83%	📈	83%	📈	9%	📈	13%
Italy	2	2	2	2	1	4	4	3	3	4	4	1	1	📉	82%	📉	3%	📉	6%	📉	50%	👉	7%
Japan	1	2	2	2	2	2	3	1	3	1	1	3	1	📉	56%	👉	57%	📈	46%	📉	56%	📉	69%
Mexico	3	2	2	3	3	3	4	1	3	4	1	1	1	👉	58%	📉	3%	📉	3%	📉	76%	📈	67%
Russia	1	1	1	1	4	4	1	2	3	3	3	3	2	👉	46%	📈	66%	📈	51%	📈	20%	📈	15%
South Africa	1	2	1	1	1	4	4	3	2	1	2	2	4	📈	55%	-	-	📈	26%	📉	15%	📈	25%
South Korea	4	3	2	4	2	4	-	3	3	2	1	1	4	📉	22%	📉	54%	📉	54%	📉	30%	📈	10%
Spain	3	3	2	1	4	1	4	3	3	4	1	1	1	📉	50%	📉	6%	📈	9%	📉	46%	📈	62%
Turkey	3	1	2	2	1	3	4	3	3	3	4	1	4	📉	1%	📈	3%	📈	3%	📉	97%	📉	97%
United Kingdom	-	2	2	2	2	3	4	1	2	4	1	4	4	📉	58%	📈	49%	📉	6%	📉	37%	👉	41%
United States	2	2	2	1	2	2	2	2	1	4	4	3	3	📉	71%	📉	48%	📉	81%	📉	57%	📉	85%
MODE/MEAN	3	2	2	1	1	3	4	3	3	4	1	1	1	📉	43%	📉	36%	📉	32%	📉	47%	📈	46%
Data Source: Bloomberg, BIS, World Bank, IMF. Intellectual Property of Hedgeye Risk Management.																							

Data Source: Bloomberg, BIS, World Bank, IMF. Intellectual Property of Hedgeye Risk Management.





# 3

## ECB

You want cowbell, the ECB is giving you more cowbell . . . by the sounds of indefinitely. The market has already effectively set expectations for no increase in interest rates until the back half of 2020. According to the Financial Times, the ECB will be asking its market contacts (no insider dealing there!) what they think will happen to Eurozone monetary policy, likely strengthening the message that cheap credit is not going away. German CPI coming in at +1.4% y/y versus consensus at +1.5% and prior at +1.7% will provide support for ECB.





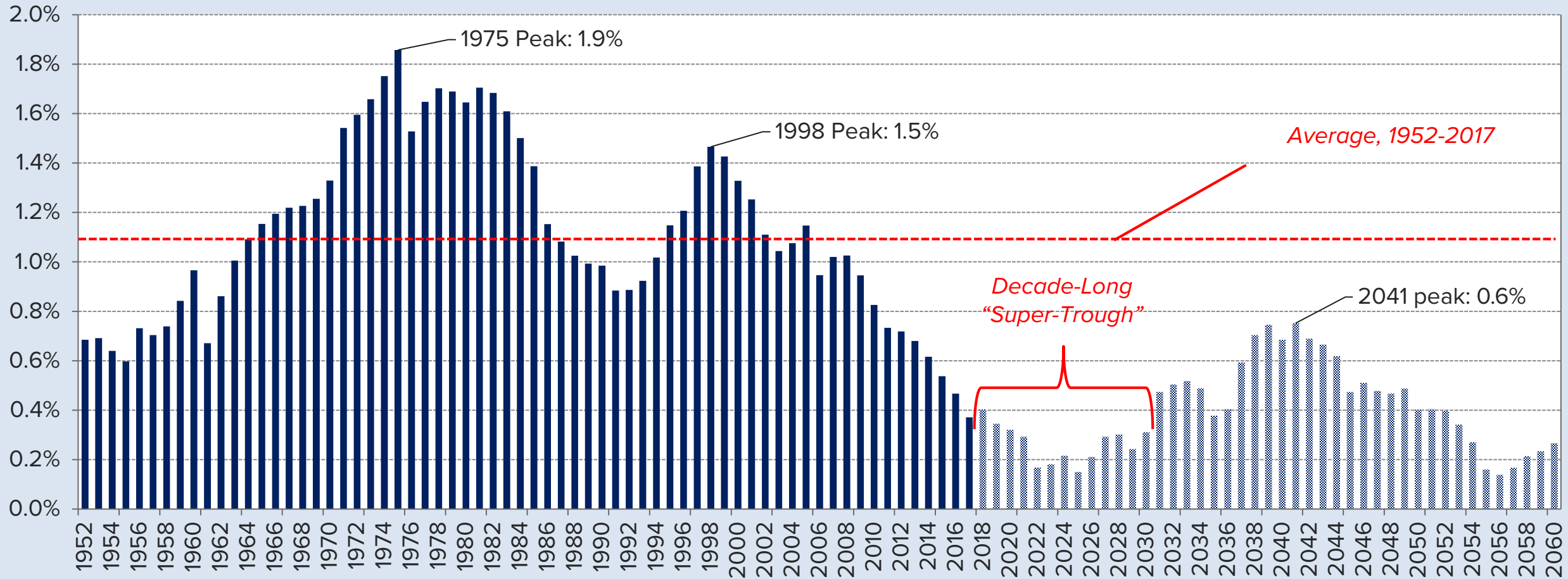
**NEIL HOWE**

DEMOGRAPHY



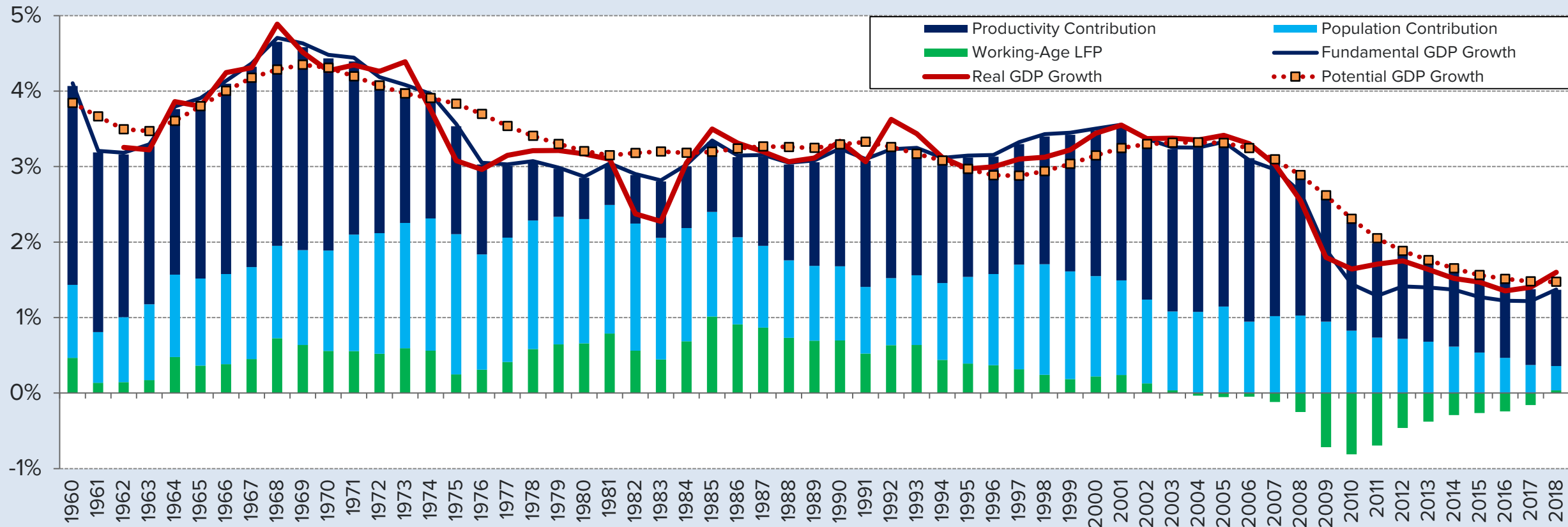
# WHERE'S THE "BOOM"?

## YoY U.S. Working-Age (20-64) Population Growth, History and Projections (2017 to 2060)



# FUNDAMENTAL GDP: ADDING UP THE DRIVERS

## Fundamental GDP Growth\* vs. Real/Potential GDP Growth: Trailing 10YR CAGR (1960 to 2018\*\*)



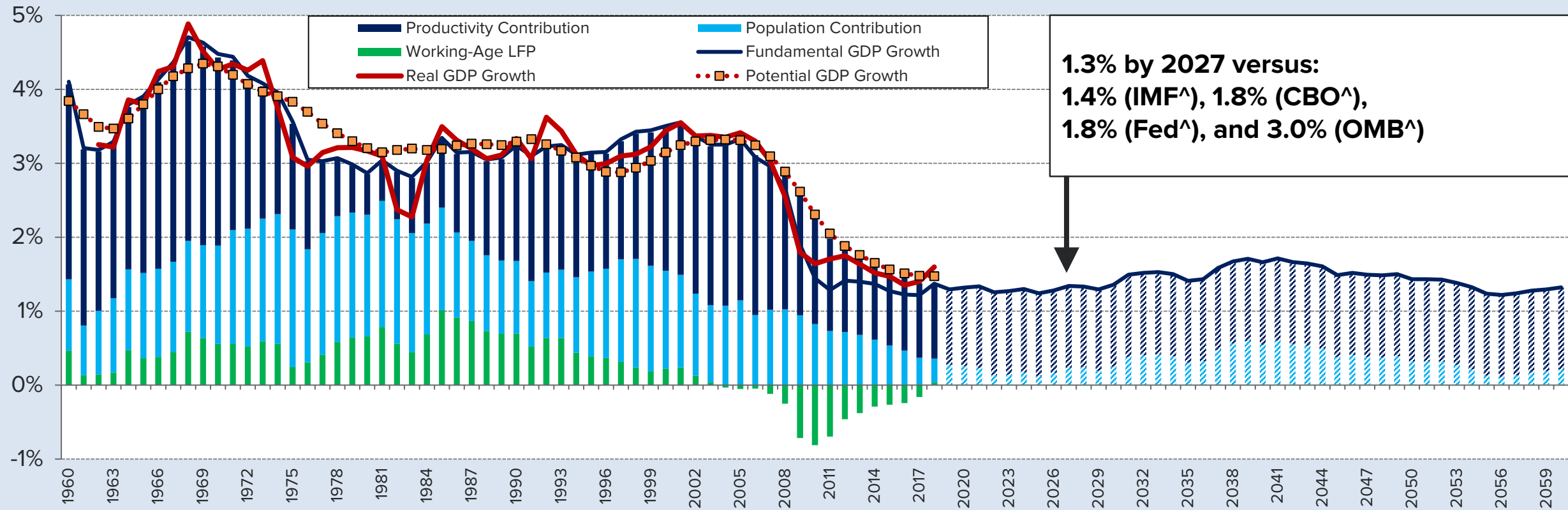
\* Fundamental GDP growth = (10-YR trailing productivity CAGR x 10-YR trailing prime-age LFP CAGR x YOY working-age population growth rate)

\*\* 2018 values estimated using latest available data.



# FUNDAMENTAL GDP: LOOKING AHEAD LONG-TERM

## Fundamental GDP Growth\* vs. Real/Potential GDP Growth: Trailing 10YR CAGR (1960 to 2060\*\*)



\* Fundamental GDP growth = (10-YR trailing productivity CAGR x 10-YR trailing prime-age LFP CAGR x YOY working-age population growth rate)

\*\* 2018 values estimated using latest available data. Projections after 2018 assume no contribution from working-age LFP growth.

^ 2018 forecasts for 2027. Exceptions: "longer run" for Fed; and 2023 for IMF.

**MACRO GRIND**



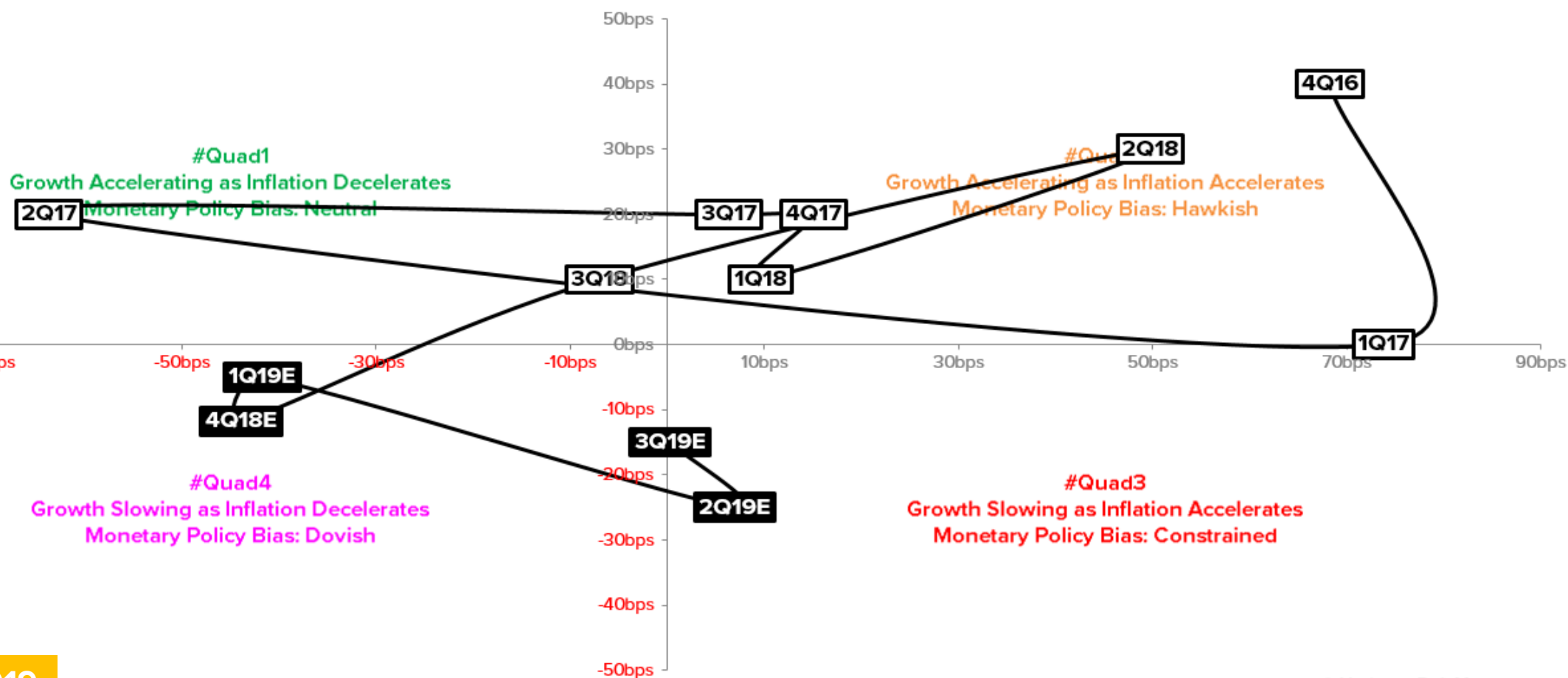
# S&P 500 Earnings

S&P 500 INDEX			Range CQ4 Ending: 11/16/2018 - 2/15/2019				
1) Surprise		2) Growth					
Sector (GICS)	Reported	Sales Growth		Earnings Growth			
11) All Securities	154 / 500	<div><div></div></div>	4.17%	<div><div></div></div>	11.06%		
12) > Energy	4 / 30	<div><div></div></div>	1.76%	<div><div></div></div>	-10.94%		
13) > Materials	6 / 24	<div><div></div></div>	-0.13%	<div><div></div></div>	-2.53%		
14) > Industrials	32 / 69	<div><div></div></div>	6.34%	<div><div></div></div>	23.04%		
15) > Consumer Discretionary	14 / 64	<div><div></div></div>	1.53%	<div><div></div></div>	6.58%		
16) > Consumer Staples	10 / 33	<div><div></div></div>	7.03%	<div><div></div></div>	6.61%		
17) > Health Care	18 / 61	<div><div></div></div>	7.14%	<div><div></div></div>	12.23%		
18) > Financials	36 / 68	<div><div></div></div>	2.72%	<div><div></div></div>	16.02%		
19) > Information Technology	24 / 68	<div><div></div></div>	-0.76%	<div><div></div></div>	2.66%		
20) > Communication Services	3 / 22	<div><div></div></div>	12.10%	<div><div></div></div>	28.19%		
21) > Utilities	2 / 27	<div><div></div></div>	4.87%	<div><div></div></div>	6.03%		
22) > Real Estate	5 / 32	<div><div></div></div>	11.30%	<div><div></div></div>	19.86%		

United States	4Q15	1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18		4Q18E	1Q19E	2Q19E	3Q19E	NTM
Real GDP QoQ SAAR	0.40%	1.50%	2.30%	1.90%	1.80%	1.80%	3.00%	2.80%	2.30%	2.20%	4.20%	3.40%	Hedgeye Estimates	1.80%	2.00%	3.11%	2.72%	-
Percentile (T10Y)	21%	41%	59%	46%	46%	44%	69%	64%	59%	56%	90%	82%	Bloomberg Consensus Estimates	2.60%	2.12%	2.40%	2.20%	-
Real GDP YoY	2.00%	1.60%	1.30%	1.50%	1.90%	1.90%	2.10%	2.30%	2.50%	2.60%	2.90%	3.00%	Hedgeye Estimates	2.88%	2.83%	2.58%	2.43%	2.68%
Percentile (T10Y)	51%	33%	23%	28%	54%	51%	64%	67%	72%	74%	90%	90%	Bloomberg Consensus Estimates	3.10%	3.04%	2.61%	2.34%	2.77%
Headline CPI YoY	0.47%	1.08%	1.05%	1.12%	1.80%	2.54%	1.90%	1.97%	2.12%	2.21%	2.71%	2.64%	Hedgeye Estimates	2.20%	1.79%	1.86%	1.86%	1.93%
Percentile (T10Y)	15%	18%	18%	23%	59%	77%	67%	69%	74%	79%	87%	87%	Bloomberg Consensus Estimates	2.20%	1.81%	2.03%	2.20%	2.06%

## United States

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



Updated: 1/25/2019

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# Our Risk Management Overlay is Rules-Based

## #QUAD1

- Maximum gross exposure, tight net exposure. Growth investing bias.
- **Asset Class Overweight(s):** Equities and Credit
- **Asset Class Underweight(s):** Fixed Income
- **Equity Sector Overweight(s):** Tech, Consumer Discretionary and Industrials
- **Equity Sector Underweight(s):** Utilities, Consumer Staples and Energy
- **Equity Style Factor Overweight(s):** Momentum, Growth and High Beta
- **Equity Style Factor Underweight(s):** Low Beta/Minimum Vol., High Dividend Yield and Value
- **Fixed Income Overweight(s):** Convertibles, HY Credit, HY Munis and Leveraged Loans
- **Fixed Income Underweight(s):** Short Duration Treasuries, TIPS and MBS

## #QUAD2

- Maximum gross exposure, wide net exposure. Inflation-hedging bias.
- **Asset Class Overweight(s):** Equities and Credit
- **Asset Class Underweight(s):** Fixed Income
- **Equity Sector Overweight(s):** Tech, Industrials and Consumer Discretionary
- **Equity Sector Underweight(s):** Utilities, REITS and Consumer Staples
- **Equity Style Factor Overweight(s):** Momentum, Growth and High Beta
- **Equity Style Factor Underweight(s):** Low Beta/Minimum Vol., High Dividend Yield and Value
- **Fixed Income Overweight(s):** Convertibles, Leveraged Loans, TIPS, HY Credit and IG Credit
- **Fixed Income Underweight(s):** Long Duration Treasuries and Munis

## #QUAD3

- Low gross exposures, tight net exposure. Defensive, yield-chasing bias.
- **Asset Class Overweight(s):** Fixed Income
- **Asset Class Underweight(s):** Equities and Credit
- **Equity Sector Overweight(s):** Utilities, REITS and Energy
- **Equity Sector Underweight(s):** Financials, Materials and Consumer Staples
- **Equity Style Factor Overweight(s):** Low Beta/Minimum Vol., Growth and Quality
- **Equity Style Factor Underweight(s):** Value, High Dividend Yield and Small Caps
- **Fixed Income Overweight(s):** Long Duration Treasuries, Taxable Munis and TIPS
- **Fixed Income Underweight(s):** HY Credit, Leveraged Loans, IG Credit and Convertibles

## #QUAD4

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

# 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	\$105.72	-0.65%	6.78%	6.78%	6.78%
Financial Select Sector	XLF	\$25.83	-0.35%	8.44%	8.44%	8.44%
Health Care Select Sector	XLV	\$88.34	0.49%	2.12%	2.12%	2.12%
Technology Select Sector	XLK	\$64.35	-1.08%	3.82%	3.82%	3.82%
Consumer Staples Select Sector	XLP	\$52.07	0.23%	2.54%	2.54%	2.54%
Industrial Select Sector	XLI	\$70.36	1.38%	9.24%	9.24%	9.24%
Materials Select Sector	XLB	\$53.59	1.04%	6.08%	6.08%	6.08%
The Energy Select Sector	XLE	\$62.49	0.30%	8.96%	8.96%	8.96%
Utilities Select Sector	XLU	\$53.22	0.28%	0.57%	0.57%	0.57%
Real Estate Select Sector	XLRE	\$33.72	0.78%	8.77%	8.77%	8.77%
Communications Services Sector	XLC	\$43.69	-1.18%	5.84%	5.84%	5.84%
S&P 500	SPX	2,640.00	-0.15%	5.31%	5.31%	5.31%



# 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	\$105.72	-0.50%	1.47%	1.47%	1.47%
Financial Select Sector	XLF	\$25.83	-0.20%	3.13%	3.13%	3.13%
Health Care Select Sector	XLV	\$88.34	0.63%	-3.20%	-3.20%	-3.20%
Technology Select Sector	XLK	\$64.35	-0.93%	-1.49%	-1.49%	-1.49%
Consumer Staples Select Sector	XLP	\$52.07	0.38%	-2.77%	-2.77%	-2.77%
Industrial Select Sector	XLI	\$70.36	1.53%	3.93%	3.93%	3.93%
Materials Select Sector	XLB	\$53.59	1.18%	0.77%	0.77%	0.77%
The Energy Select Sector	XLE	\$62.49	0.45%	3.65%	3.65%	3.65%
Utilities Select Sector	XLU	\$53.22	0.43%	-4.74%	-4.74%	-4.74%
Real Estate Select Sector	XLRE	\$33.72	0.92%	3.46%	3.46%	3.46%
Communications Services Sector	XLC	\$43.69	-1.03%	0.53%	0.53%	0.53%

# Market Share Volume & Total Value Traded

<u>INDEX/SECURITY</u>	<b>VOLUME: (1/29) vs.</b>			
	<u>Prior Day</u>	<u>1M Ave</u>	<u>3M ave</u>	<u>1Y Ave</u>
Total Market Volume*	0%	-3%	-2%	-2%
Total Exchange Volume**	-7%	-10%	-16%	-6%

\*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	0.3%	1.7%	10.2%	1.1%	-5.7%	9.6%
	Low Debt/EV	-0.3%	0.9%	8.3%	2.9%	-5.9%	7.3%
SI	High Short Interest	0.0%	1.7%	9.3%	1.6%	-7.4%	8.7%
	Low Short Interest	0.0%	0.5%	7.1%	1.5%	-4.5%	6.2%
BETA	High Beta	-0.4%	1.0%	12.8%	2.4%	-11.9%	11.9%
	Low Beta	0.3%	1.0%	5.3%	1.4%	0.6%	4.9%
YIELD	High Yield	0.4%	1.4%	7.6%	-0.5%	-6.4%	7.1%
	Low Yield	-0.4%	1.0%	10.7%	4.2%	-5.7%	9.7%
MKT CAP	MCAP Bottom 25%	0.1%	1.6%	10.4%	-0.6%	-10.9%	9.6%
	MCAP Top 25%	0.1%	0.3%	6.8%	2.0%	-3.3%	5.9%
Sales	Top 25% Sales Growth	-0.1%	0.9%	9.1%	3.5%	-5.3%	8.1%
	Bottom 25% Sales Growth	0.2%	1.4%	9.9%	-0.3%	-9.0%	9.2%
EPS	Top 25% EPS Growth	0.1%	1.2%	10.2%	3.8%	-4.9%	9.1%
	Bottom 25% EPS Growth	0.4%	1.9%	9.6%	0.4%	-8.8%	9.0%

*\*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	2.41%	2.7	1.4	4	10	-7	101	128	172
3M LIBOR	2.75%	0.0	-2.0	-5	22	-7	98	126	174
2Y T-Note	2.57%	-1.7	-1.4	6	-24	-40	63	95	137
5Y T-Note	2.55%	-3.5	-3.2	-1	-37	-55	20	52	70
10Y T-Note	2.71%	-3.4	-2.9	-1	-38	-55	17	34	37
30Y T-Note	3.04%	-2.6	-1.9	2	-29	-42	15	17	10
2Y-10Y Spread, Bps	14	-1.7	-1.5	-6.5	-13	-15	-46	-61	-100
IG SPREAD (AAABBB)	1.73%	0.0	-3.0	-12	17	-16	53	16	13
HIGH YIELD	7.12%	0.0	-3.0	-86	25	-100	145	71	74
5Y BREAK EVEN	1.64%	0.7	-0.9	12.9	-28.7	-55.1	17.3	-12.4	-5.2

# Key \$USD Correlations

METRIC	15D	30D	90D	120D	180D	52-Wk Rolling 30D Correlation			
						High	Low	% Time Pos	% Time Neg
SPX	0.68	-0.51	-0.39	-0.63	-0.50	0.73	-0.92	45%	55%
BRENT Oil	0.48	-0.53	-0.54	-0.66	-0.68	0.84	-0.86	33%	67%
CRB Index	-0.37	-0.43	-0.14	-0.66	-0.65	0.67	-0.94	52%	48%
GOLD	-0.51	-0.73	0.02	0.32	-0.17	0.54	-0.94	9%	91%

\*Days = Trading Days

# CFTC Non-Commercial Net Long Positioning

METRIC	Latest	W/W Chg	3M Ave	6M Ave	1Y Ave	Z-Score	
						1Y	3Y
SPX (Index + E-mini)	192,577	36,953	179,085	173,610	168,317	0.56X	1.00X
10Y Treasury	(240,521)	52,121	(328,256)	(516,453)	(405,822)	0.93X	-0.49X
CRUDE OIL	371,510	(3,760)	408,861	512,472	622,077	-2.09X	-0.89X
GOLD	24,569	14,317	(26,985)	(51,810)	27,917	-0.03X	-0.93X
COPPER	(3,030)	(9,829)	5,642	4,144	21,328	-1.15X	-0.78X
USD	36,031	(2,073)	38,997	36,434	18,590	0.99X	0.80X
JPY	(104,327)	(4,993)	(102,531)	(87,105)	(61,238)	-0.97X	-1.05X
EUR	(51,796)	3,969	(51,017)	(20,906)	45,139	-1.34X	-0.71X
GBP	(60,151)	(17,104)	(41,461)	(52,668)	(18,357)	-1.08X	-0.59X

Not updated due to  
government shutdown



# Global AM Data

Date Time	Country/Region	C	Event	Period	Surv(M)	Actual	Prior	Revised	Ticker
01/29/19 09:00	United States	US	S&P CoreLogic CS US HPI YoY NSA	Nov	--	5.19%	5.48%	5.33%	SPCSUSAY Index
01/29/19 10:00	United States	US	Conf. Board Consumer Confidence	Jan	124	120.2	128.1	126.6	CONCCONF Index
01/29/19 10:00	United States	US	Conf. Board Present Situation	Jan	--	169.6	171.6	169.9	CONCPSIT Index
01/29/19 10:00	United States	US	Conf. Board Expectations	Jan	--	87.3	99.1	97.7	CONCEXP Index
01/29/19 16:00	South Korea	SK	Business Survey Manufacturing	Feb	--	65	71	--	KOBSMC Index
01/29/19 16:00	South Korea	SK	Business Survey Non-Manufacturing	Feb	--	70	72	--	KOBSNMC Index
01/29/19 18:50	Japan	JN	Retail Trade YoY	Dec	1.00%	1.30%	1.40%	--	JNNETYOY Index
01/29/19 19:30	Australia	AU	CPI YoY	4Q	1.70%	1.80%	1.90%	--	AUCPIYOY Index
01/29/19 19:30	Australia	AU	CPI Trimmed Mean YoY	4Q	1.80%	1.80%	1.80%	--	RBCPTRIY Index
01/29/19 23:30	Indonesia	ID	Danareksa Consumer Confidence	Jan	--	102.3	100.7	--	EC13IDCC Index
01/30/19 00:00	Japan	JN	Consumer Confidence Index	Jan	42.4	41.9	42.7	--	JCOMSHCF Index
01/30/19 01:30	France	FR	GDP YoY	4Q A	0.90%	0.90%	1.40%	1.30%	FRGEGDPY Index
01/30/19 02:00	Germany	GE	Import Price Index YoY	Dec	2.10%	1.60%	3.10%	--	GRIMP95Y Index
01/30/19 02:00	Germany	GE	GfK Consumer Confidence	Feb	10.3	10.8	10.4	10.5	ECO1GFKC Index
01/30/19 02:00	Turkey	TU	Economic Confidence	Jan	--	78.5	75.2	--	TUBCECC Index
01/30/19 02:45	France	FR	PPI YoY	Dec	--	1.20%	2.60%	--	FRPIYOY Index
01/30/19 02:45	France	FR	Consumer Spending YoY	Dec	-0.70%	-2.30%	-2.00%	-1.50%	FRSNTTLY Index
01/30/19 03:00	Spain	SP	Retail Sales SA YoY	Dec	--	0.80%	1.40%	1.10%	SPRSWDSY Index
01/30/19 04:00	Italy	IT	Consumer Confidence Index	Jan	112.8	114	113.1	113.2	ITPSSA Index
01/30/19 04:00	Italy	IT	Manufacturing Confidence	Jan	103	102.1	103.6	103.4	ITBCI Index
01/30/19 04:00	Italy	IT	Economic Sentiment	Jan	--	99.2	99.8	99.7	ITESECSE Index
01/30/19 05:00	Eurozone	EC	Economic Confidence	Jan	106.8	106.2	107.3	107.4	EUESEMU Index
01/30/19 05:00	Eurozone	EC	Business Climate Indicator	Jan	0.77	0.69	0.82	0.86	EUBCI Index
01/30/19 05:00	Eurozone	EC	Industrial Confidence	Jan	0.5	0.5	1.1	2.3	EUICEMU Index
01/30/19 05:00	Eurozone	EC	Services Confidence	Jan	11.5	11	12	12.2	EUSCEMU Index
01/30/19 05:00	Eurozone	EC	Consumer Confidence	Jan F	-7.9	-7.9	-8.3	--	EUCCEMU Index
01/30/19 05:00	Brazil	BZ	FGV Inflation IGPM YoY	Jan	6.73%	6.74%	7.54%	--	IBREGPMY Index

# Volatility

TIME WINDOW SETTING: VOLATILITY_30D		TOTAL RETURN PERFORMANCE	IVOL PREMIUM/DISCOUNT						REALIZED VOLATILITY TRENDS			IMPLIED VOLATILITY TRENDS		
PUT_IMP_VOL_30D	TICKER	YTD %	IVOL PREM %	Yesterday	1W Ago	1M Ago	TTM Z-Score	3Yr Z-Score	RVOL	MM %	PERCENTILE	IVOL	MM %	PERCENTILE
			IVOL / RVOL						CURRENT		10YR	CURRENT		10YR
US EQUITIES														
			CURRENT											
Vanguard Real Estate REIT ETF	VNQ US EQUITY	9.82%	-46%	-43%	-37%	-8%	-2.4	-2.4	24.4	2%	80%	13.1	-40%	30%
Industrials Sector SPDR ETF	XLI US EQUITY	9.24%	-36%	-49%	-31%	-3%	-1.2	-1.6	29.3	1%	90%	18.8	-34%	66%
I-Shares Russell 2000 ETF	IWM US EQUITY	9.19%	-27%	-27%	-25%	-3%	-1.2	-1.4	27.2	-8%	86%	19.8	-31%	57%
Energy Sector SPDR ETF	XLE US EQUITY	8.96%	-33%	-35%	-30%	-1%	-1.6	-1.7	32.3	-6%	86%	21.7	-36%	57%
Financials Sector SPDR ETF	XLF US EQUITY	8.44%	-25%	-28%	-27%	9%	-1.0	-1.2	24.3	-10%	75%	18.3	-38%	51%
Consumer Discretionary Sector SPDR ETF	XLV US EQUITY	6.78%	-31%	-35%	-32%	-10%	-1.1	-1.5	29.2	-11%	91%	20.2	-32%	74%
Materials Sector SPDR ETF	XLB US EQUITY	6.08%	-30%	-31%	-26%	10%	-1.1	-1.5	27.1	2%	83%	18.9	-36%	54%
Communication Services SPDR ETF	XLC US EQUITY	5.84%	-27%	-27%	-22%	15%			30.3	0%	83%	22.2	-37%	47%
SPDR S&P 500 ETF Trust	SPY US EQUITY	5.40%	-37%	-40%	-36%	-12%	-1.1	-1.5	26.3	-6%	90%	16.5	-32%	68%
Power Shares QQQ Trust ETF	QQQ US EQUITY	4.74%	-32%	-36%	-32%	-13%	-1.0	-1.3	32.8	-9%	94%	22.2	-29%	79%
Technology Sector SPDR ETF	XLK US EQUITY	3.82%	-37%	-39%	-35%	-18%	-1.0	-1.4	34.9	-7%	96%	22.1	-29%	81%
Consumer Staples Sector SPDR ETF	XLV US EQUITY	2.54%	-32%	-34%	-30%	1%	-1.1	-1.5	20.7	4%	94%	14.0	-30%	76%
Health Care Sector SPDR ETF	XLV US EQUITY	2.12%	-31%	-35%	-37%	-1%	-1.0	-1.5	24.5	-8%	93%	16.9	-36%	72%
Utilities Sector SPDR ETF	XLU US EQUITY	0.57%	-35%	-33%	-29%	-1%	-2.0	-2.1	22.0	8%	92%	14.3	-29%	55%
INTERNATIONAL EQUITIES														
I-Shares MSCI Emerging Markets ETF	EEM US EQUITY	7.09%	-1%	-3%	1%	7%	0.3	-0.2	19.0	-16%	44%	18.8	-22%	35%
I-Shares China Large-Cap ETF	FXI US EQUITY	7.06%	-2%	-2%	5%	18%	0.2	-0.3	21.0	-8%	40%	20.6	-23%	28%
I-Shares MSCI Japan ETF	EWJ US EQUITY	5.70%	-30%	-31%	-25%	5%	-1.3	-1.4	20.0	-6%	74%	13.9	-37%	20%
Euro Stoxx 50 Index	SX5E INDEX	5.23%	-14%	-14%	-19%	14%	-0.8	-0.9	16.3	-11%	42%	14.0	-33%	19%
CURRENCIES														
Currency Shares British Pound ETF	FXB US EQUITY	2.60%	21%	24%	9%	20%	0.5	0.5	9.2	-11%	63%	11.1	-10%	77%
Currency Shares Japanese Yen ETF	FXJ US EQUITY	0.24%	-19%	-20%	-21%	15%	-1.9	-1.3	8.6	16%	47%	7.0	-18%	11%
PowerShares US Dollar Index ETF	UUP US EQUITY	0.08%	-30%	-32%	-10%	8%	-0.7	-1.0	8.4	10%	63%	5.8	-29%	5%
Currency Shares Euro Trust ETF	FXE US EQUITY	-0.26%	-21%	-24%	-17%	0%	-1.4	-1.3	8.2	11%	42%	6.4	-12%	8%
COMMODITIES														
United States Oil Fund ETF	USO US EQUITY	15.53%	-22%	-22%	-24%	1%	-1.4	-1.4	44.3	-16%	88%	34.4	-35%	65%
United States Natural Gas Fund ETF	UNG US EQUITY	4.61%	-48%	-51%	-30%	-38%	-2.2	-2.8	73.6	-24%	98%	38.4	-36%	45%
PowerShares DB Base Metals Fund ETF	DBB US EQUITY	4.42%	-100%	-100%	408%	63%	-1.2	-0.9	16.4	-2%	34%	0.0	-100%	0%
SPDR Gold Shares ETF	GLD US EQUITY	2.25%	-3%	-8%	-1%	36%	-0.7	-0.7	9.9	17%	14%	9.5	-17%	4%
PowerShares DB Agriculture Fund ETF	DBA US EQUITY	0.41%	53%	58%	53%	73%	1.0	0.8	8.1	1%	11%	12.3	-11%	15%
FIXED INCOME														
I-Shares IBOXX HY Corporate Bond ETF	HYG US EQUITY	3.86%	-45%	-46%	-30%	18%	-1.6	-1.7	10.3	16%	78%	5.7	-46%	25%
I-Shares J.P. Morgan USD EM Bond ETF	EMB US EQUITY	3.26%	0%	4%	6%	-3%	-0.7	-1.0	5.9	-17%	51%	5.9	-15%	25%
I-Shares IBOXX IG Corporate Bond ETF	LQD US EQUITY	2.18%	30%	22%	35%	73%	0.4	0.5	3.2	2%	2%	4.2	-24%	4%
I-Shares 7-10 Year Treasury Bond ETF	IEF US EQUITY	-0.04%	-16%	-11%	-14%	54%	-0.6	-0.8	5.3	49%	38%	4.5	-18%	6%
I-Shares 20+ Year Treasury Bond ETF	TLT US EQUITY	-0.40%	-10%	-5%	3%	34%	-0.9	-1.0	9.6	13%	13%	8.7	-24%	3%

Data Source: CBOE, CME, Bloomberg

# 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	-0.15%	0.27%	6.07%	-0.61%	-7.24%	-7.02%	-0.93%	5.31%	5.31%
Nasdaq 100 Index	NDX	0.96%	-0.21%	5.48%	-2.30%	-11.66%	-4.10%	-2.28%	4.78%	4.78%
Dow Jones Industrial Average	INDU	0.21%	0.72%	6.23%	-0.01%	-3.28%	-6.87%	-0.64%	5.37%	5.37%
Russell 2000 Index	RTY	-0.14%	0.96%	10.48%	0.19%	-12.68%	-8.13%	-0.77%	9.11%	9.11%
SPDR S&P 500 ETF Trust	SPY	-0.13%	0.21%	6.18%	-0.72%	-7.25%	-7.02%	-0.89%	5.40%	5.40%
Consumer Discretionary Select Sector SPDR ETF	XLY	0.65%	0.48%	7.93%	2.05%	-6.04%	-2.06%	-1.22%	6.78%	6.78%
Financials Select Sector SPDR ETF	XLF	0.35%	0.51%	9.45%	2.34%	-8.01%	-13.76%	-0.65%	8.44%	8.44%
Health Care Select Sector SPDR ETF	XLV	0.49%	-1.25%	3.75%	1.20%	-0.57%	-1.42%	-0.65%	2.12%	2.12%
Technology Select Sector SPDR ETF	XLK	-1.08%	0.16%	4.57%	-4.20%	-13.32%	-5.52%	-2.40%	3.82%	3.82%
Communication Services Sector SPDR ETF	XLC	-1.18%	-0.79%	5.66%	-1.53%			-2.04%	5.84%	
Consumer Staples Select Sector SPDR ETF	XLP	0.23%	0.19%	2.97%	-4.89%	-1.81%	-10.88%	0.66%	2.54%	2.54%
Industrials Select SPDR ETF	XLI	1.38%	2.36%	10.04%	1.53%	-6.71%	-11.76%	0.41%	9.24%	9.24%
Materials Select Sector SPDR ETF	XLB	1.04%	1.55%	6.39%	6.10%	-9.45%	-16.02%	0.88%	6.08%	6.08%
Energy Select Sector SPDR ETF	XLE	0.31%	0.06%	8.70%	-5.56%	-17.92%	-18.94%	-0.70%	8.96%	8.96%
Utilities Select Sector SPDR ETF	XLU	0.28%	0.04%	0.99%	-3.64%	1.86%	4.33%	-0.19%	0.57%	0.57%
Real Estate Select SPDR ETF	XLRE	0.78%	3.44%	9.37%	5.57%	3.31%	5.14%	1.78%	8.77%	8.77%
I-Shares US Telecommunications ETF	IYZ	-0.79%	0.25%	6.80%	0.00%	0.25%	-6.24%	-1.46%	4.93%	4.93%
I-Shares Russell 2000 ETF	IWM	0.24%	0.83%	10.36%	0.17%	-12.72%	-8.07%	-0.77%	9.19%	9.19%
I-Shares Russell 2000 Value ETF	IWN	0.04%	1.23%	10.57%	-0.20%	-11.90%	-9.39%	-0.31%	9.44%	9.44%
I-Shares Russell 2000 Growth ETF	IWO	0.34%	0.59%	10.35%	0.48%	-13.40%	-6.79%	-1.15%	8.91%	8.91%
I-Shares Russell 1000 ETF	IWB	-0.13%	0.36%	6.57%	-0.35%	-7.31%	-6.98%	-0.86%	5.67%	5.67%
I-Shares Russell 1000 Value ETF	IWD	0.20%	0.67%	6.89%	0.26%	-5.35%	-9.65%	-0.15%	6.03%	6.03%
I-Shares Russell 1000 Growth ETF	IWF	0.48%	0.04%	6.09%	-0.84%	-9.26%	-4.54%	-1.54%	5.27%	5.27%
Power Shares QQQ Trust ETF	QQQ	0.94%	0.23%	5.57%	-2.28%	-11.62%	-4.03%	-2.17%	4.74%	4.74%



# U.S. Equities Returns

U.S. EQUITIES	Ticker	D/D %	W/W%	1M%	3M%	6M%	Y/Y%	WTD%	MTD%	YTD%
Facebook	FB	2.22%	2.29%	7.19%	-1.27%	-33.71%	-23.09%	-3.23%	9.99%	9.99%
Amazon	AMZN	2.69%	-2.35%	9.05%	-4.23%	-14.47%	15.67%	-4.59%	6.12%	6.12%
Apple	AAPL	-1.04%	0.90%	-0.94%	-28.09%	-20.60%	-9.60%	-1.95%	-1.94%	-1.94%
Netflix	NFLX	-2.01%	1.15%	28.70%	8.97%	-9.36%	21.95%	-2.71%	22.88%	22.88%
Google	GOOG	0.88%	0.92%	1.60%	0.94%	-16.07%	-9.38%	-2.78%	2.42%	2.42%
SPDR Dow Jones Industrial Average ETF Trust	DIA	0.25%	0.70%	6.25%	0.03%	-3.27%	-6.84%	-0.68%	5.36%	5.36%
I-Shares Transportation Average ETF	IYT	0.52%	1.48%	8.77%	0.60%	-8.64%	-9.72%	0.45%	8.58%	8.58%
SPDR Oil & Gas Exploration & Production ETF	XOP	0.47%	0.50%	12.67%	-15.53%	-29.89%	-22.54%	-1.28%	13.61%	13.61%
I-Shares Nasdaq Biotechnology ETF	IBB	0.20%	-1.15%	12.94%	4.53%	-9.94%	-7.85%	-1.80%	11.45%	11.45%
SPDR S&P Metals & Mining ETF	XME	0.86%	2.16%	11.06%	-4.40%	-21.32%	-24.11%	-0.44%	11.91%	11.91%
VanEck Vectors Gold Miners ETF	GDV	2.42%	7.43%	4.77%	10.57%	0.78%	-8.95%	3.73%	4.17%	4.17%
I-Shares US Home Construction ETF	ITB	1.38%	3.53%	10.44%	11.64%	-11.26%	-26.44%	1.41%	10.19%	10.19%
SPDR S&P Insurance ETF	KIE	-0.70%	0.30%	6.19%	3.11%	-3.74%	-7.15%	-0.86%	5.29%	5.29%
SPDR S&P Regional Banking ETF	KRE	0.24%	1.68%	16.61%	5.84%	-13.14%	-14.48%	0.60%	14.96%	14.96%
VanEck Vectors Semiconductor ETF	SMH	-1.33%	4.02%	8.76%	5.63%	-11.31%	-10.31%	-3.17%	7.49%	7.49%
SPDR S&P Retail ETF	XRT	-1.41%	0.34%	8.29%	-4.52%	-11.60%	-9.18%	-1.70%	7.12%	7.12%
I-Shares US Broker-Dealers & Security Exchanges ETF	IAI	0.53%	-0.21%	9.30%	4.02%	-9.56%	-9.34%	-0.84%	8.05%	8.05%
I-Shares US Oil Equipment & Services ETF	IEZ	-0.12%	0.29%	19.76%	-18.08%	-30.46%	-38.34%	-2.53%	18.71%	18.71%
I-Shares Pharmaceuticals ETF	IHE	0.24%	-1.75%	3.94%	-5.15%	-10.40%	-12.60%	-1.01%	1.83%	1.83%
I-Shares US Medical Devices ETF	IHI	-0.27%	-1.16%	5.79%	2.87%	-2.06%	7.89%	-1.79%	3.83%	3.83%
Vanguard REIT ETF	VNQ	0.79%	3.41%	10.47%	4.85%	0.92%	2.40%	1.78%	9.82%	9.82%
SPDR Dow Jones REIT ETF	RWR	0.91%	3.50%	10.12%	4.57%	1.27%	4.43%	1.99%	9.69%	9.69%