THE MACRO SHOW

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1

EUROPE

2

JAPAN

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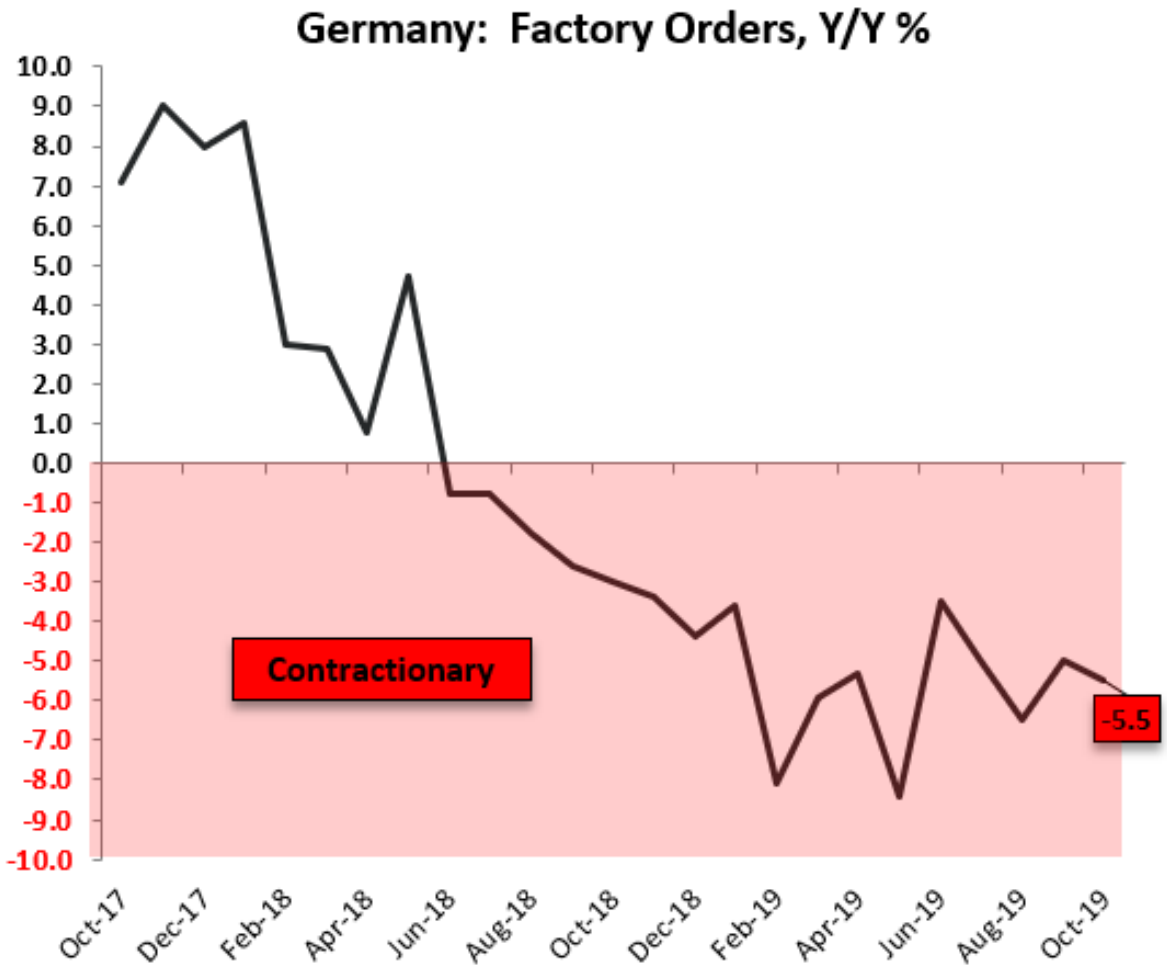
3

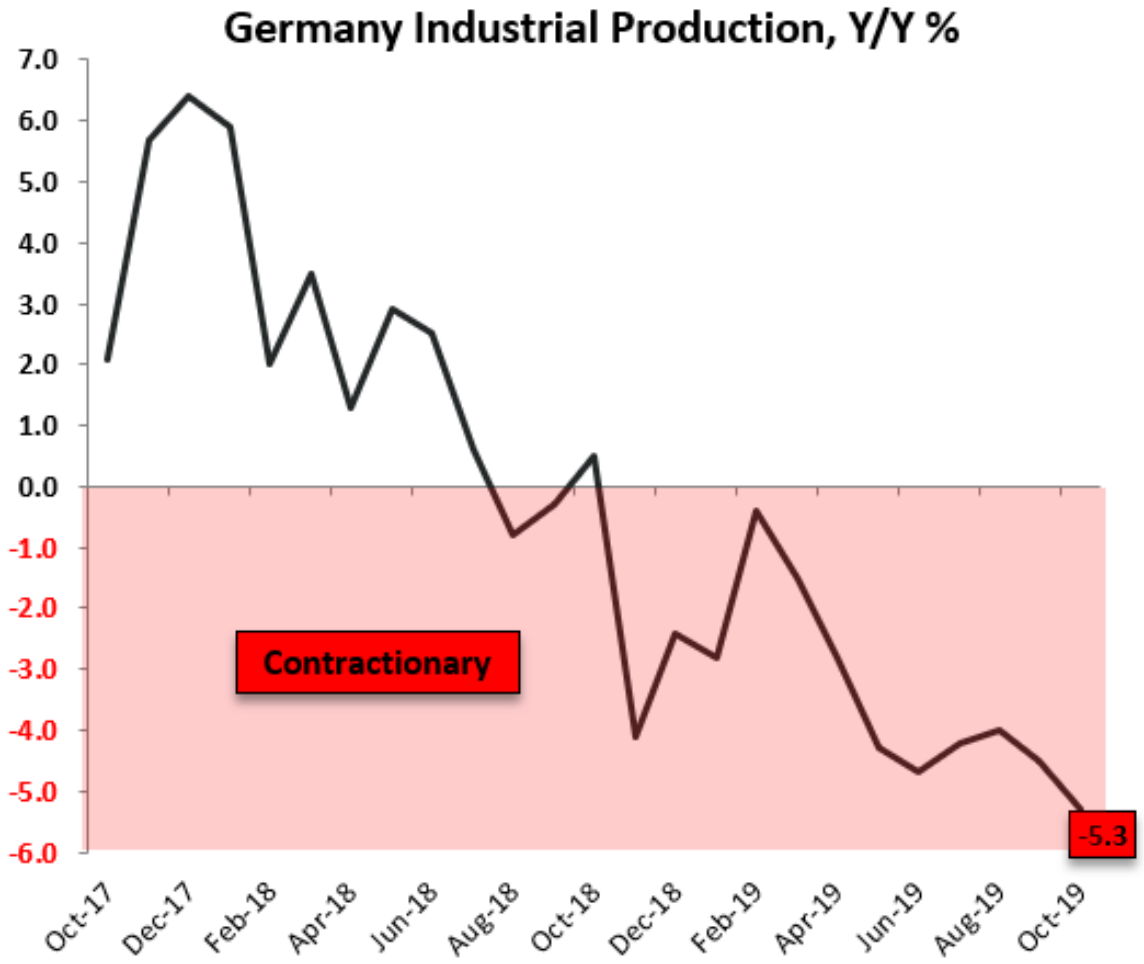
TRADE

1 EUROPE

The German macro-industrial Zeitgeist remains in Godot mode as German Industrial production cratered to -5.3% Y/Y to start 4Q. This comes on the heels of a deceleration in Germany factory Orders (-5.5% Y/Y), slowing Spanish Industrial Production (-1.3% Y/Y), and a further deceleration in Eurozone level employment and Retail Sales growth. As we highlighted yesterday, all the major economies in Europe are now tracking in either Quad 3 or Quad 4 for Q4-to-date.

"Stabilization"





DATA SOURCE: BLOOMBERG

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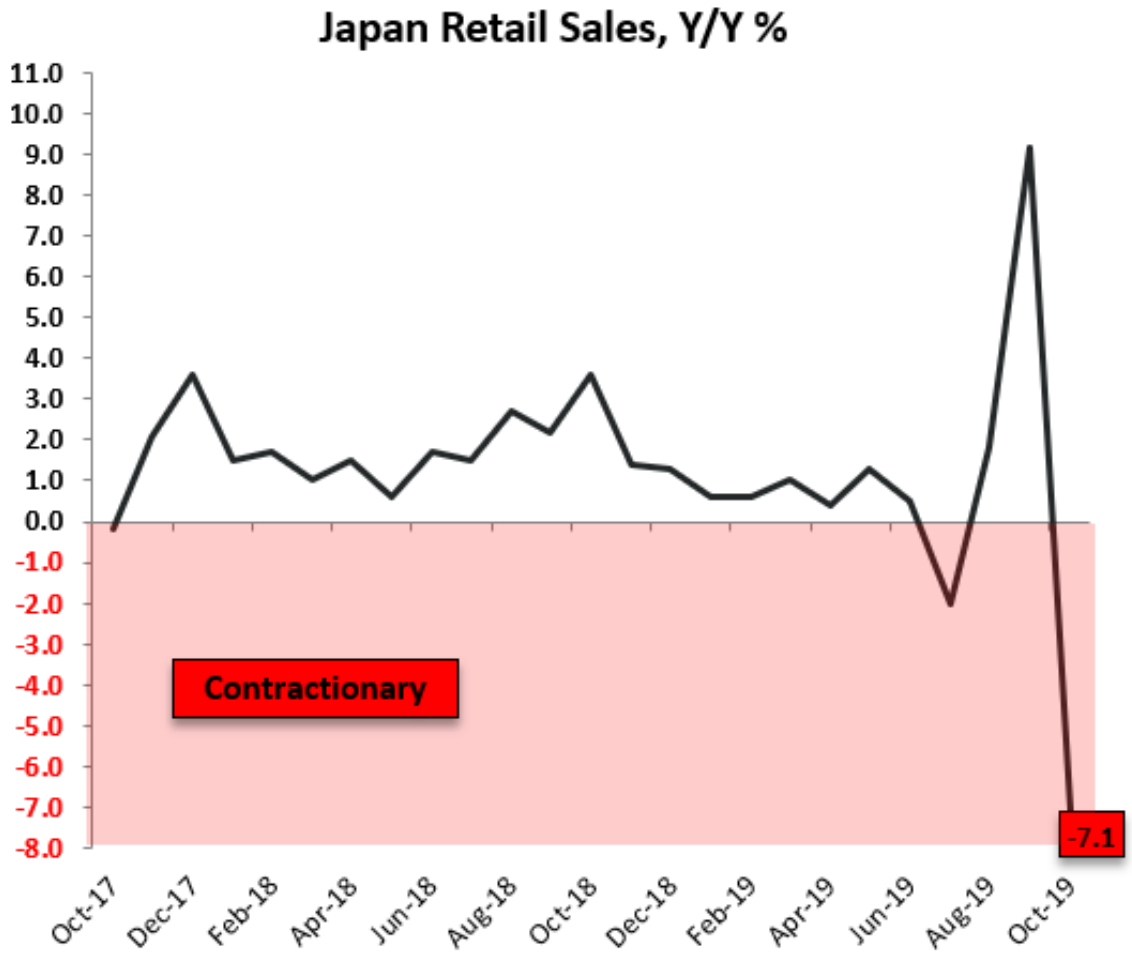
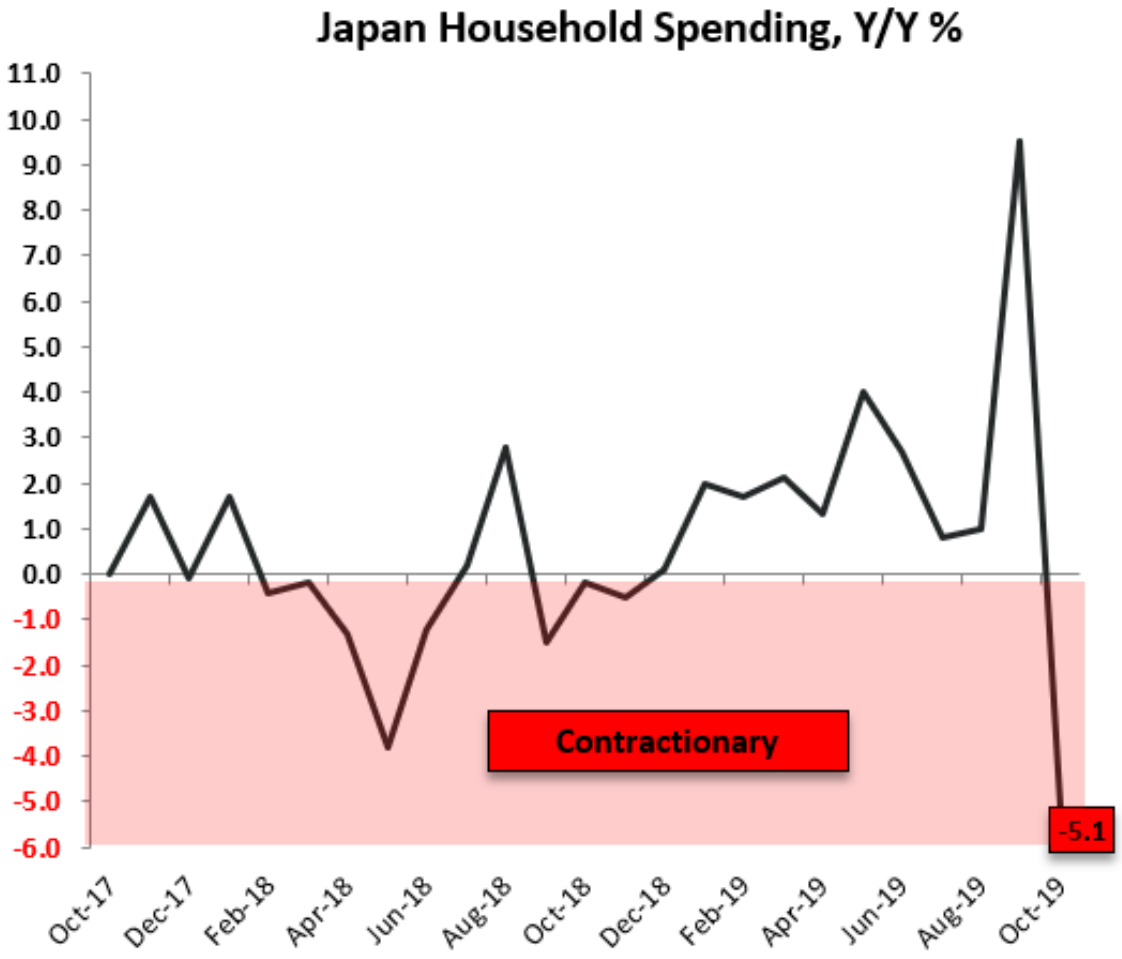
2 JAPAN

The reporting of post sales tax hike spending data is beginning and its not good. Total Household Spending fell -5.1% Y/Y, following the cue from Retail Sales which sank to -7.1% Y/Y. Along with ongoing softness in the cyclical-industrial activity where Machine tool Orders remain down -17.4% Y/Y, domestic consumption is setting up to drive negative GDP growth in 4Q.

The Hangover!





DATA SOURCE: BLOOMBERG

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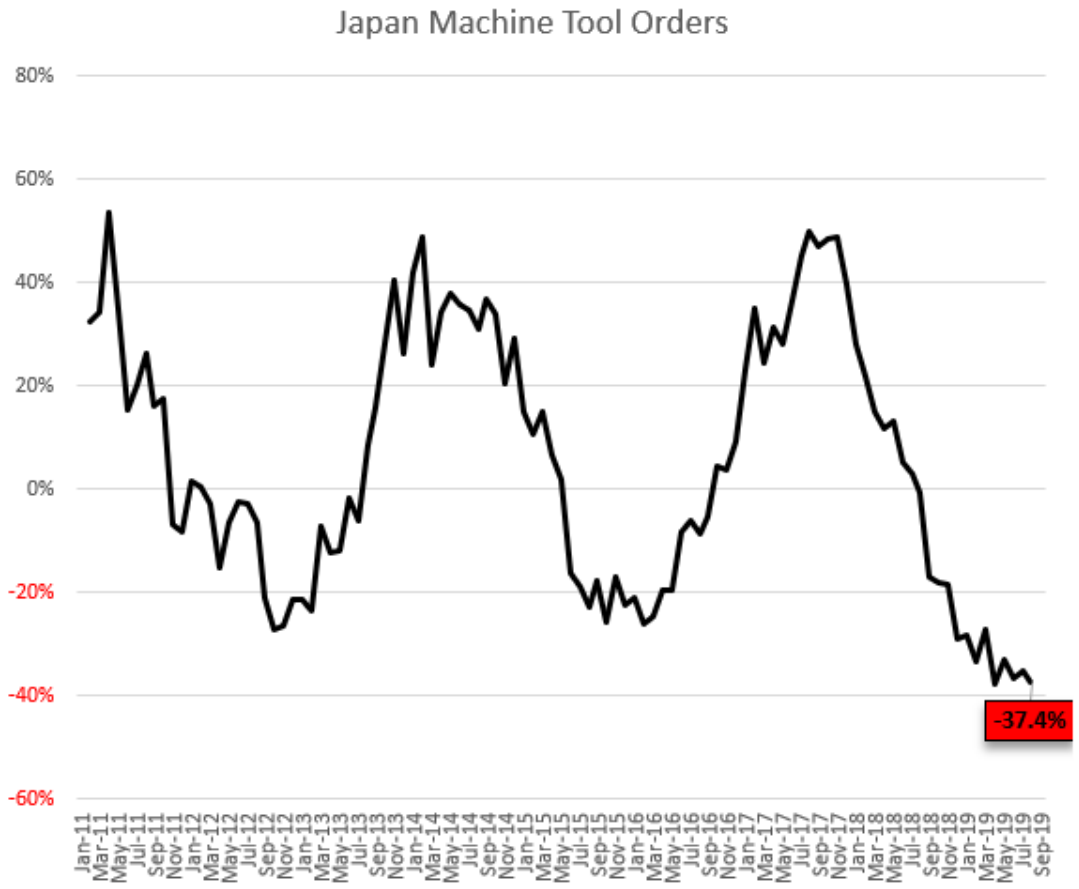
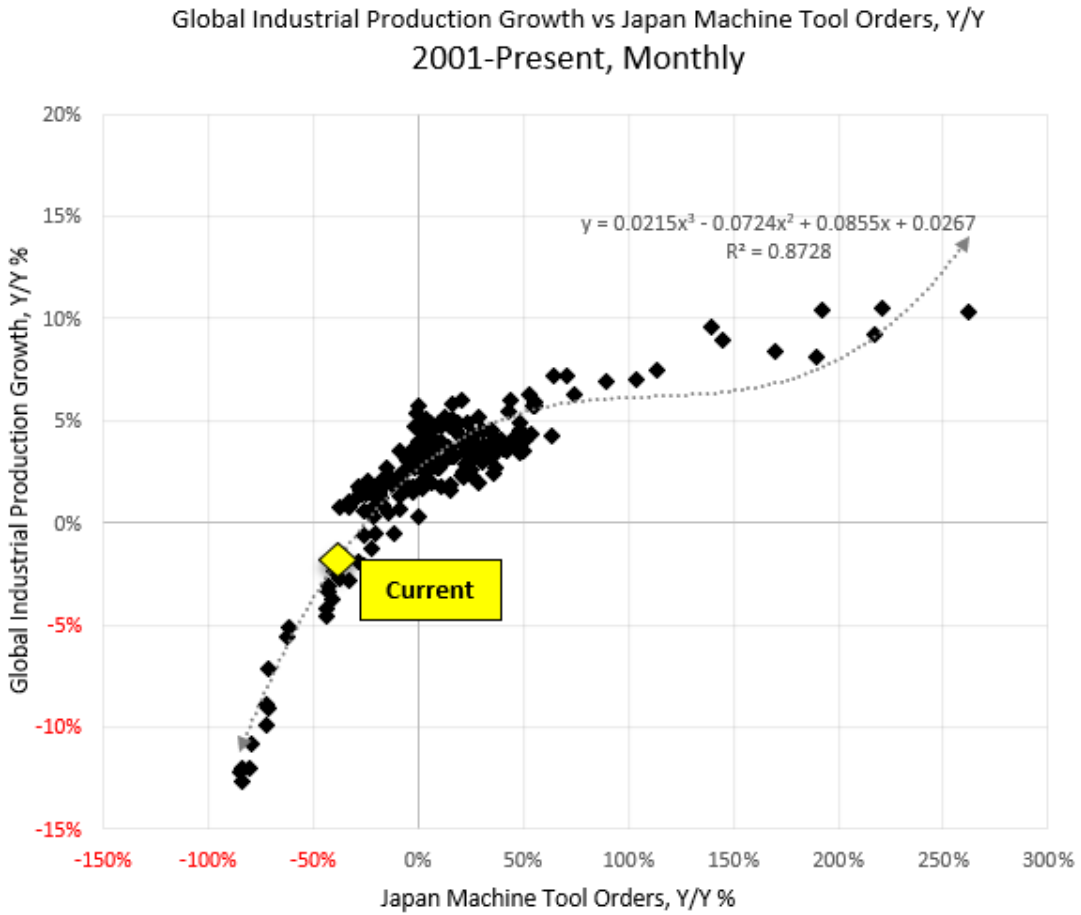
The Hangover!





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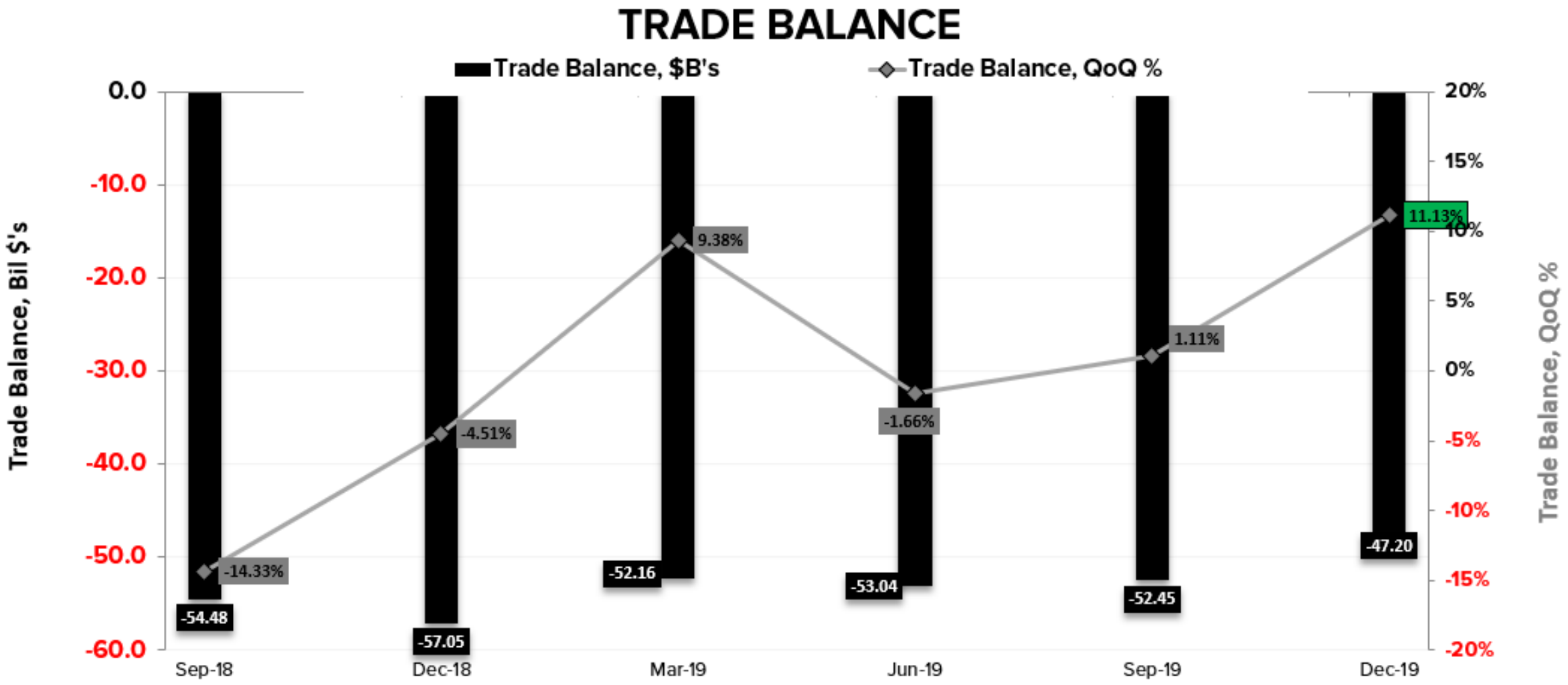
3 TRADE

“Improving Trade Balance to Support GDP” and “China processing Pork/Soy tariff waivers” are the Headlines. Under the headlines, the Trade Balance did improve from a GDP accounting perspective but it was for the wrong reason and due mostly to distortion. The “improvement” was almost exclusively a function of declining Import growth due to falling domestic demand and lower auto imports related to the auto strike. China, meanwhile - with pork prices up 100% Y/Y, driving headline inflation higher and somewhat constraining the monetary policy response to slowing growth - continues to act in its own self interest under the thin guise of good will trade gesturing.

(Still) "Good & Easy to Win"



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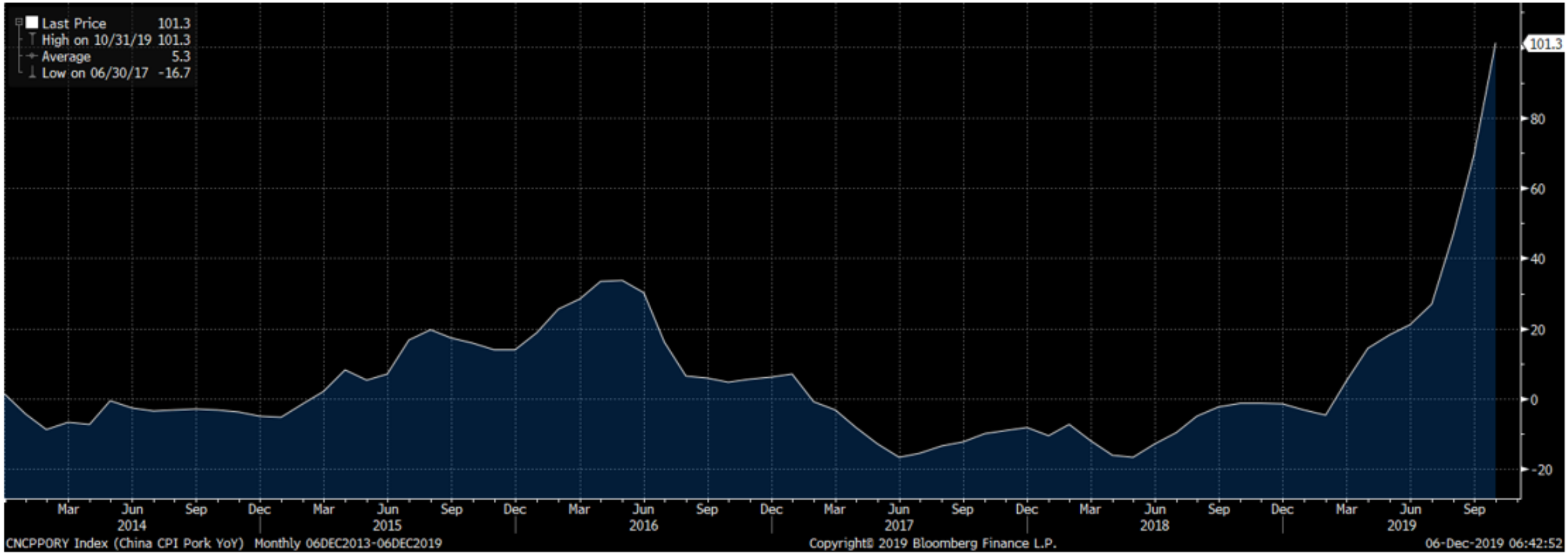
Pork Tariff Waivers: "Goodwill Gesture"



DATA SOURCE: BLOOMBERG, WSH

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CHRISTIAN DRAKE

MACRO & HOUSING

NFP RoC: Trade ↑, Trend ↓

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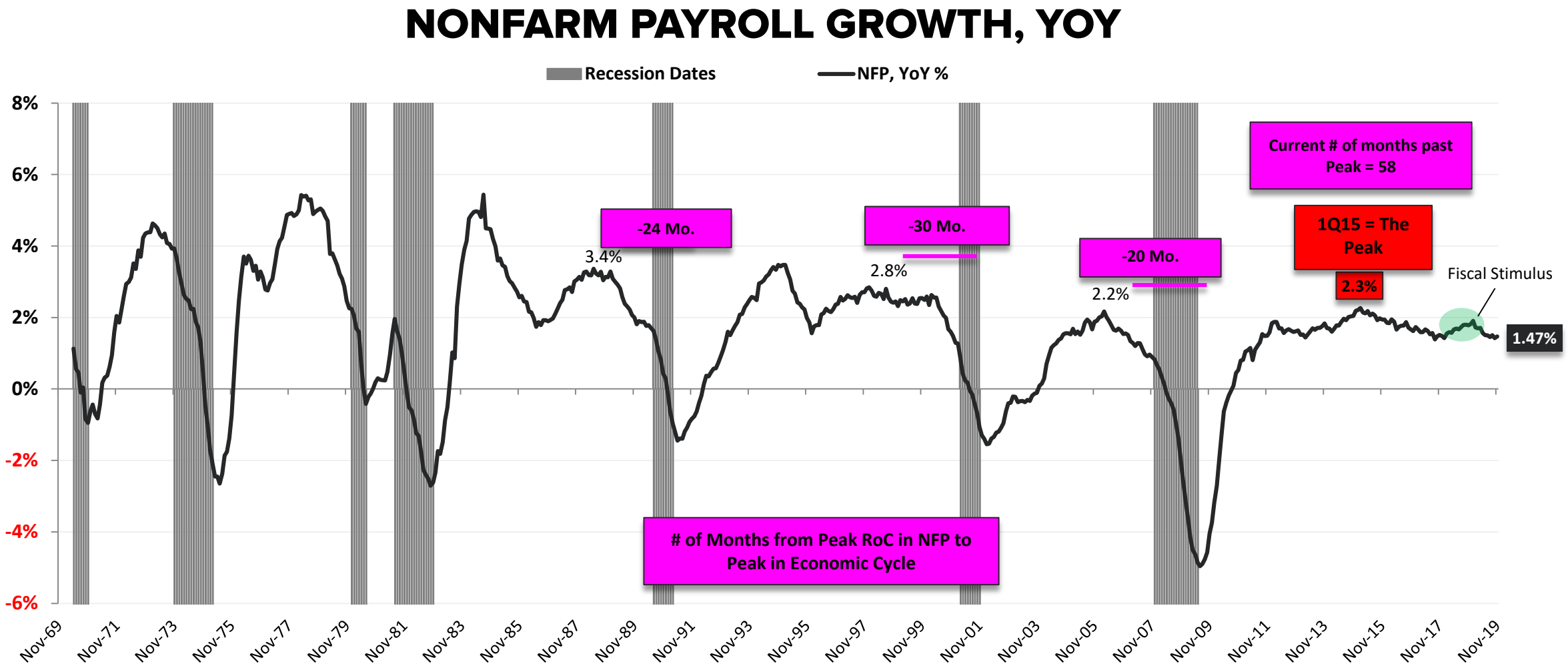

Data Source: Bloomberg

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Goods → Services → Broader Cycle

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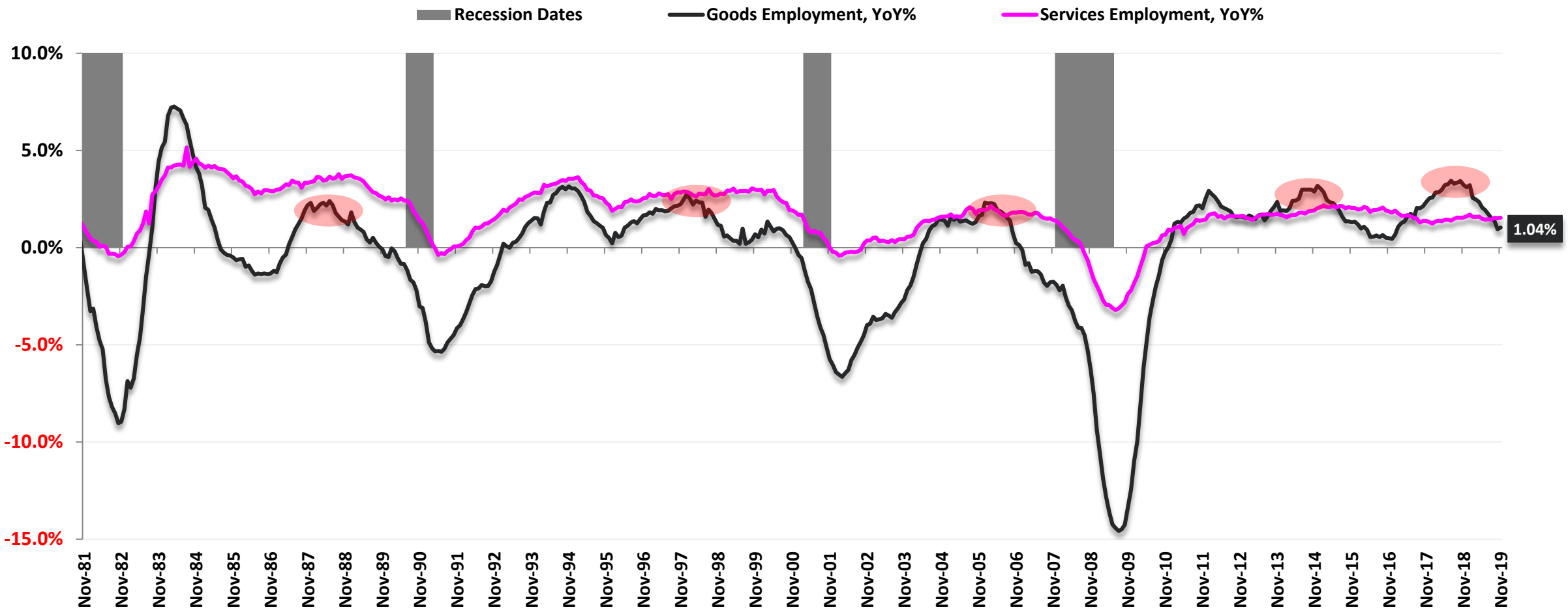
NFP: Goods vs Services Employment



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Aggregate Hours Growth → Trend ↓

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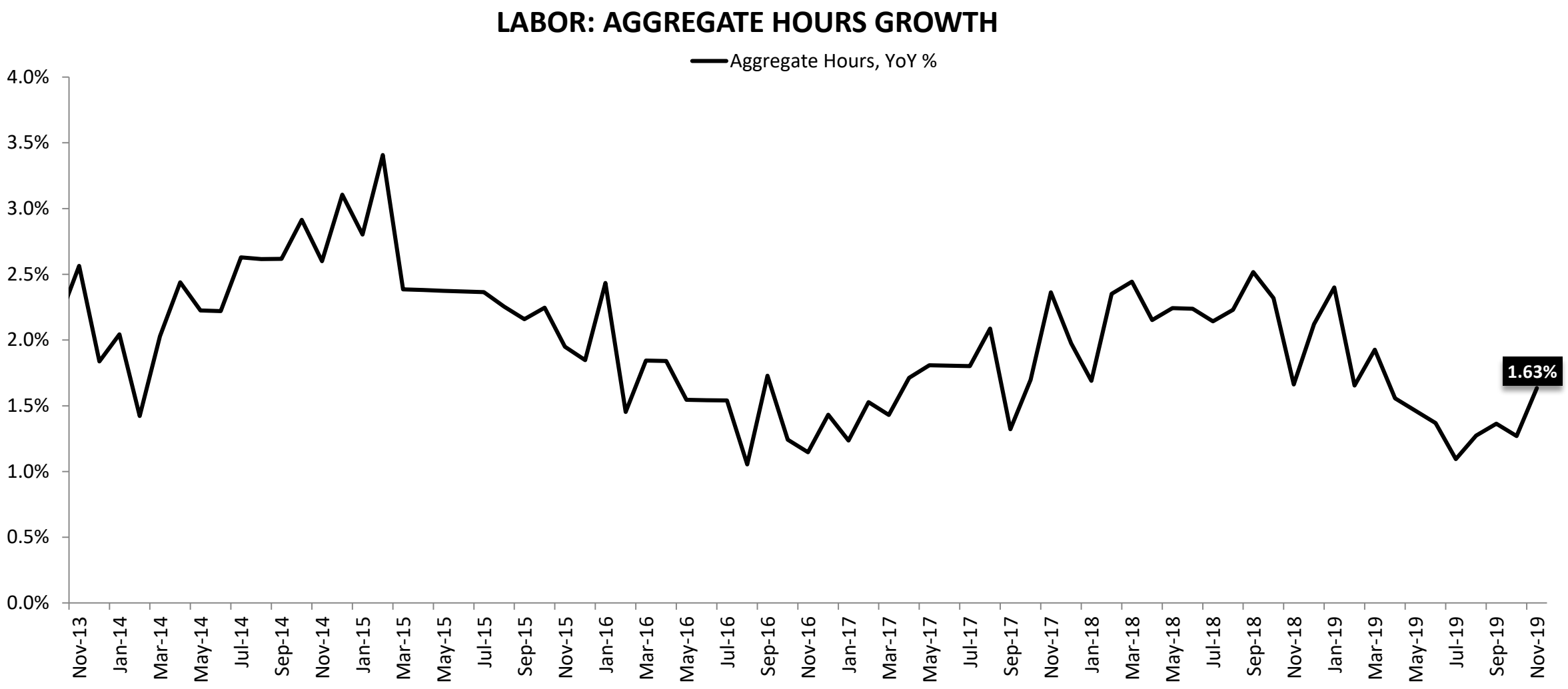

Data Source: Bloomberg

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Aggregate Hours → Real Output

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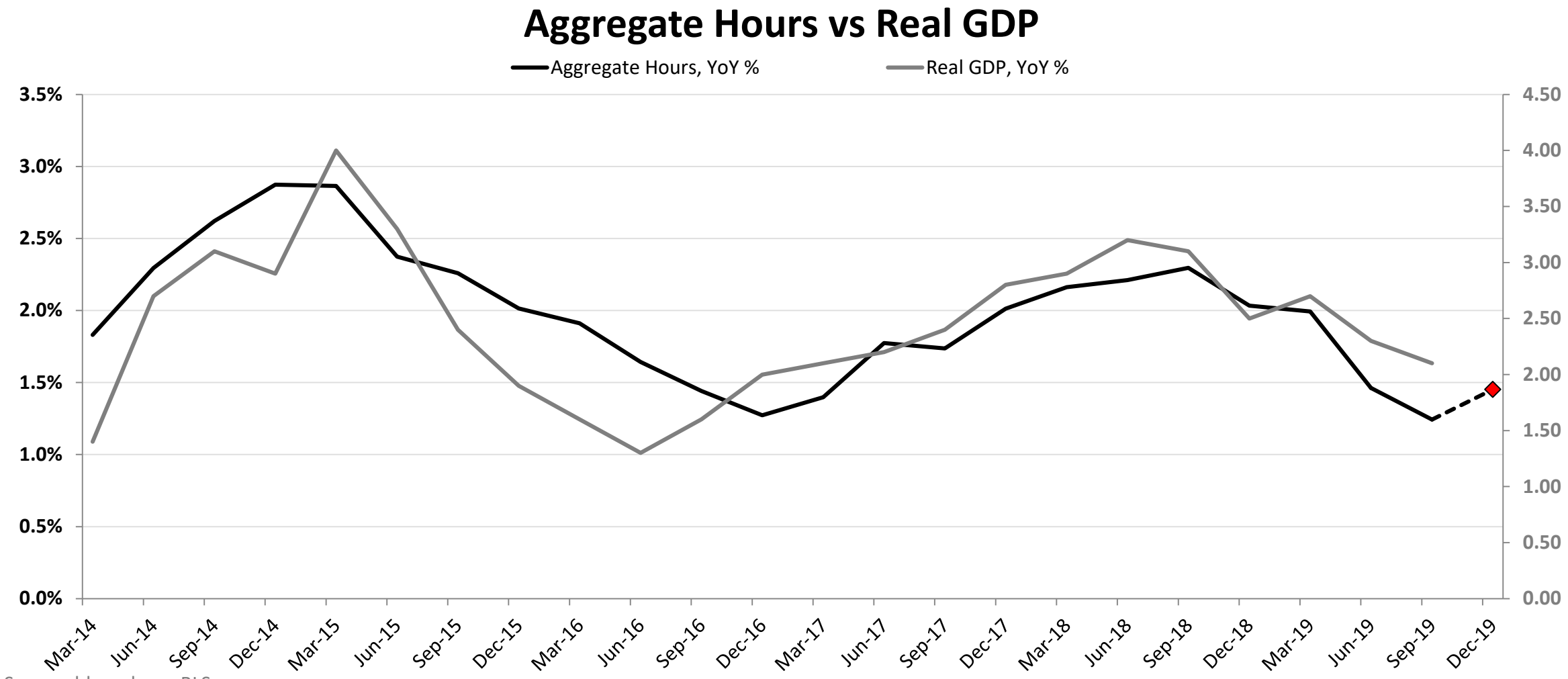

Source: bloomberg, BLS

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E2P: Peaking = Labor Scarcity ↑/Payroll Growth ↓

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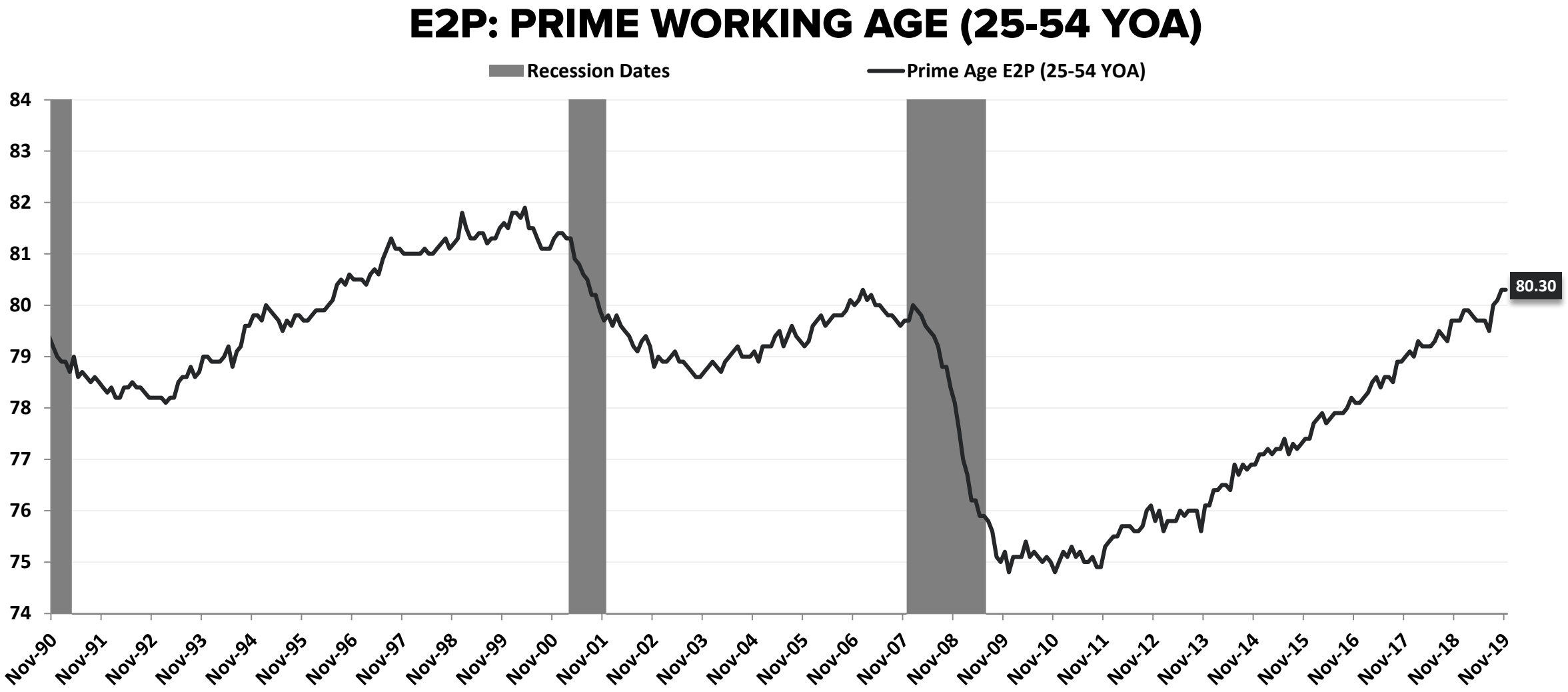

Data Source: Bloomberg

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Gross Labor Flow

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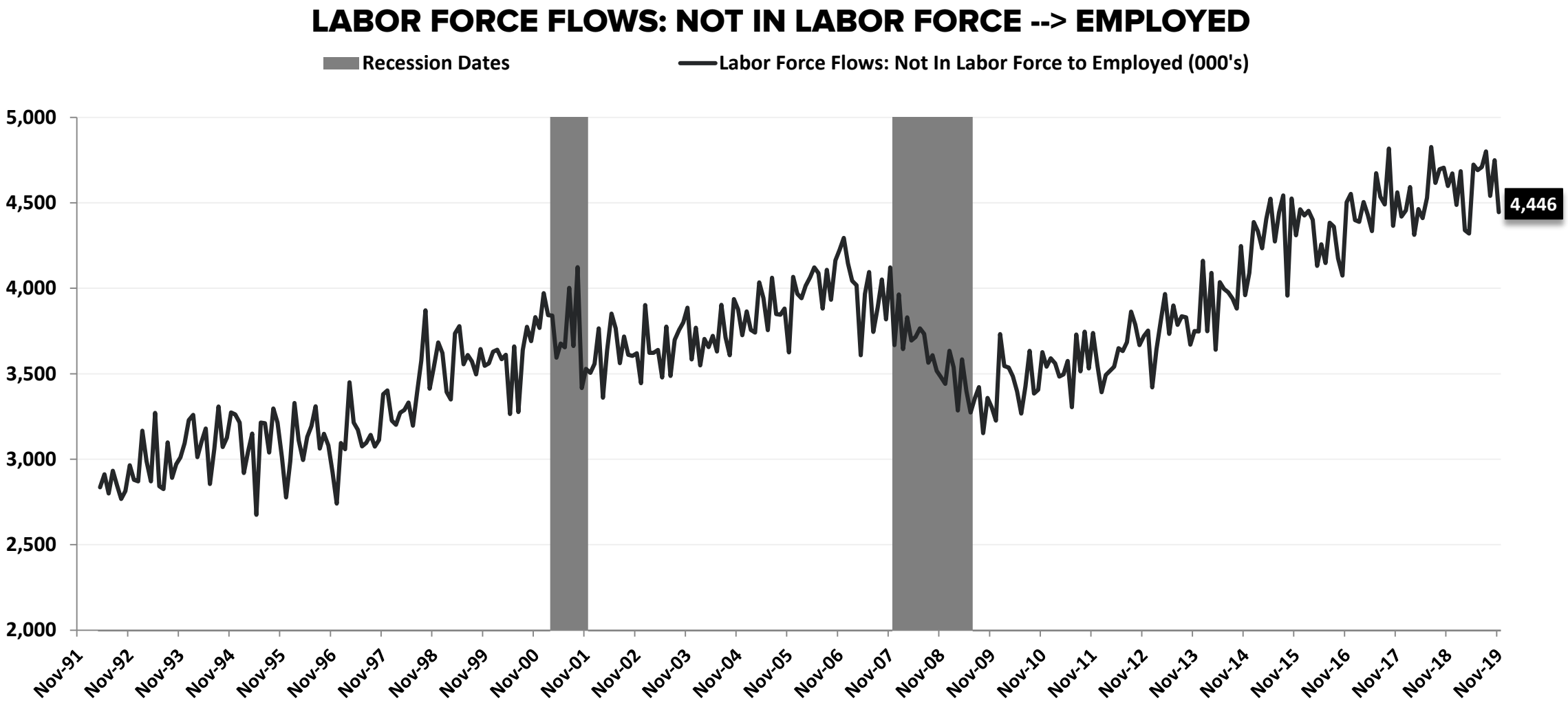

Data Source: Bloomberg

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Late-Cycle Wage Inflation, but ....

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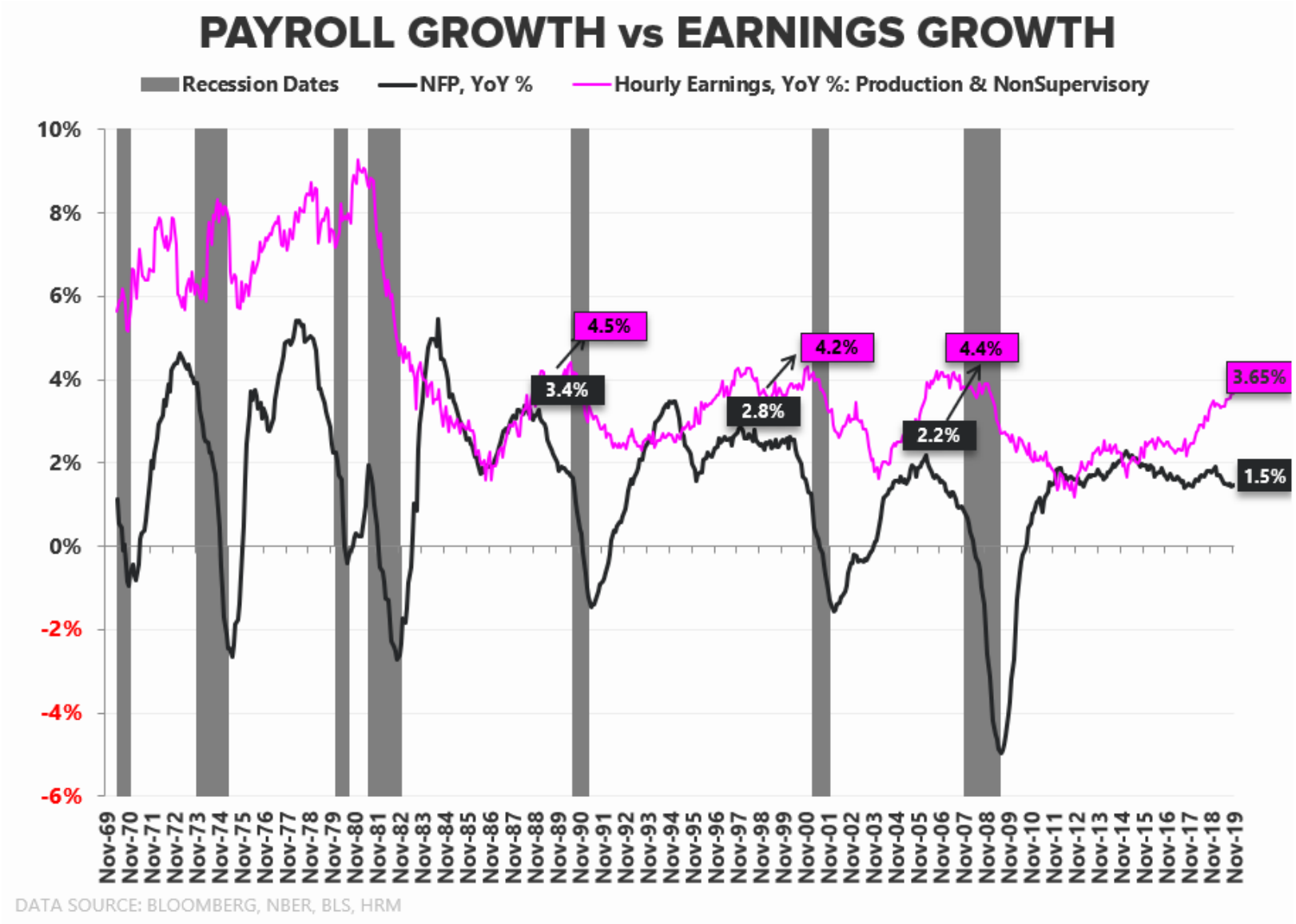

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Average Weekly Earnings Growth = ↓

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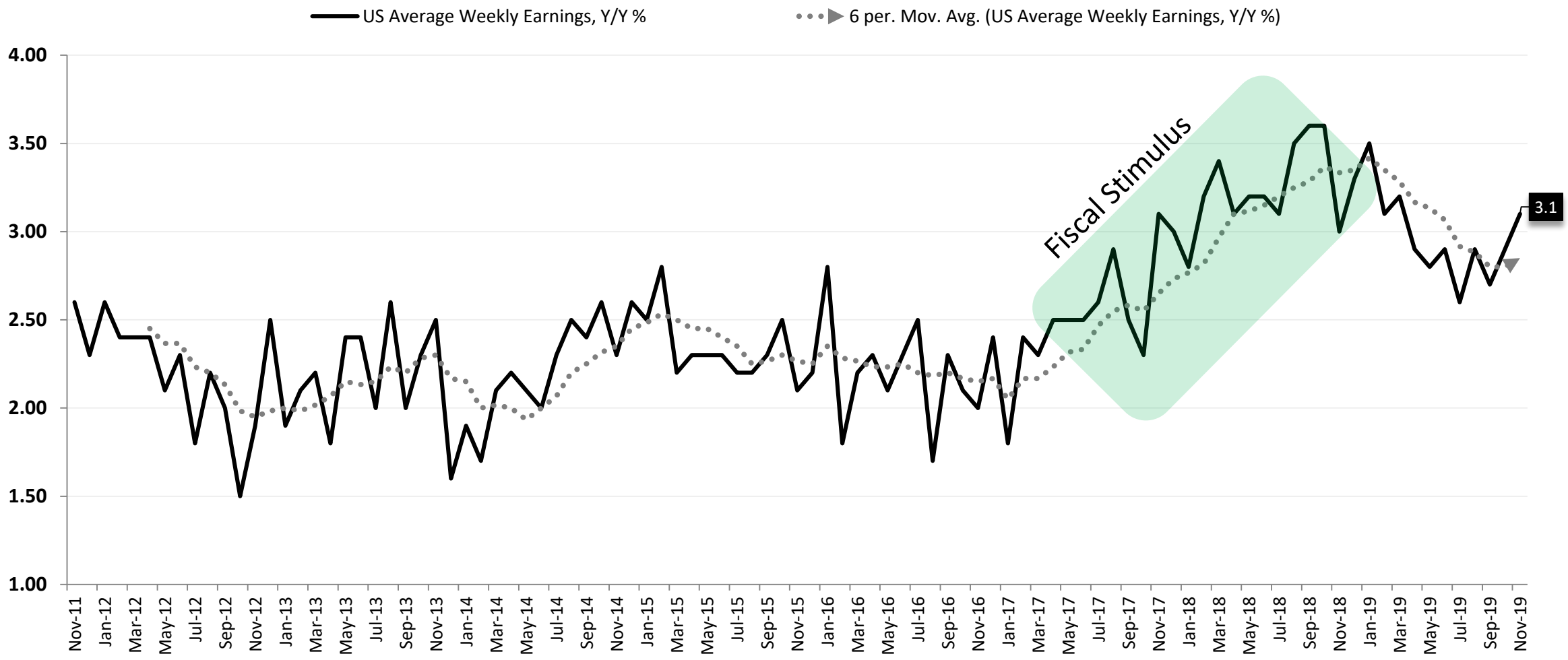

Data Source: Bloomberg

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NFP Implied IP

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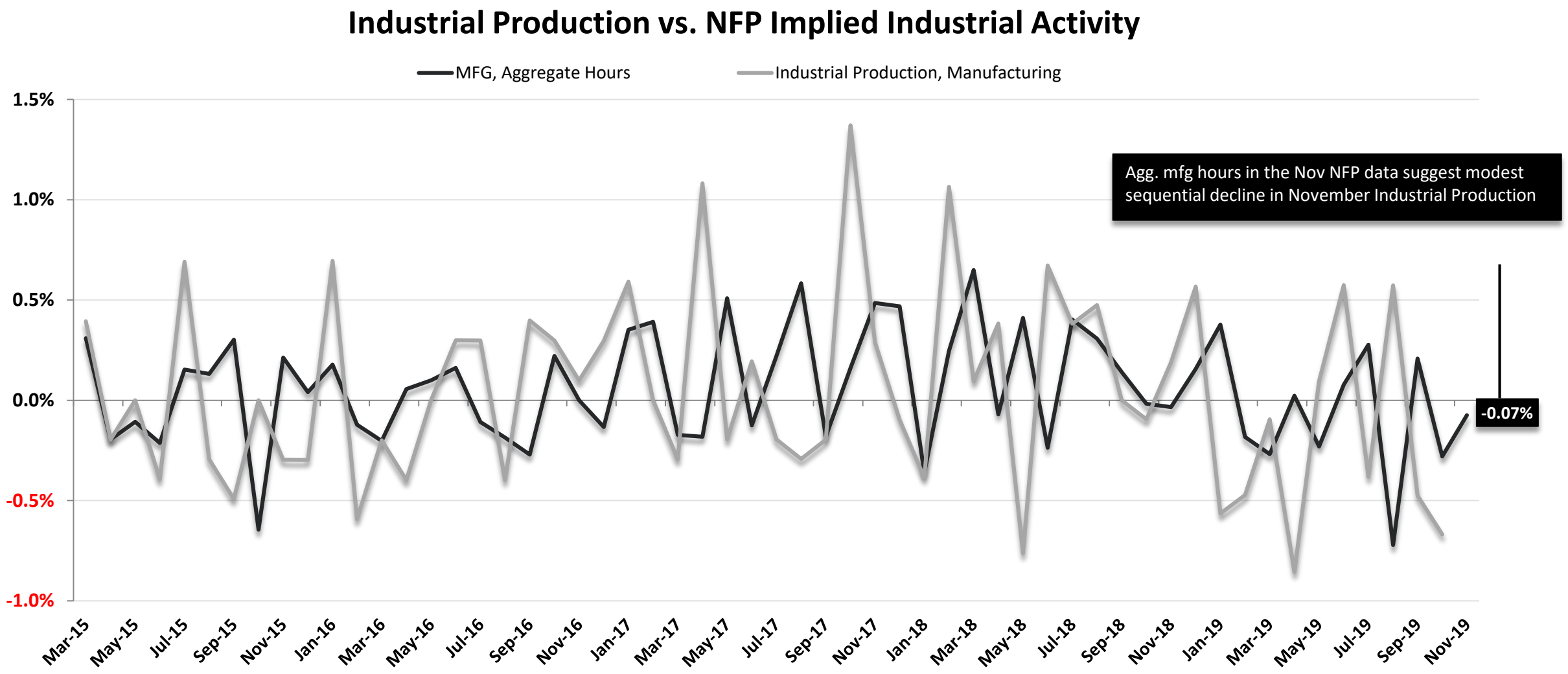

Data Source: Bloomberg

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NFP Implied Aggregate Income

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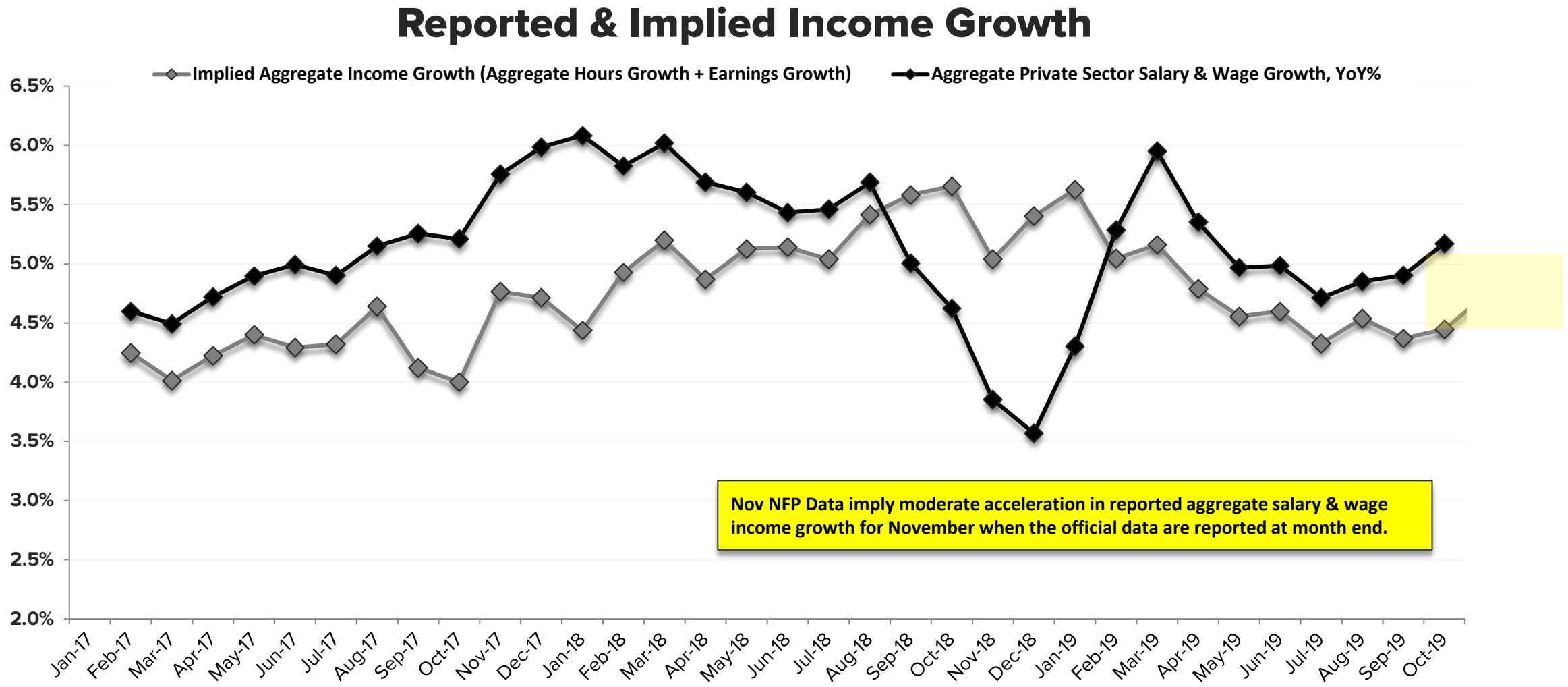

Data Source: Bloomberg

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Revision Reminder

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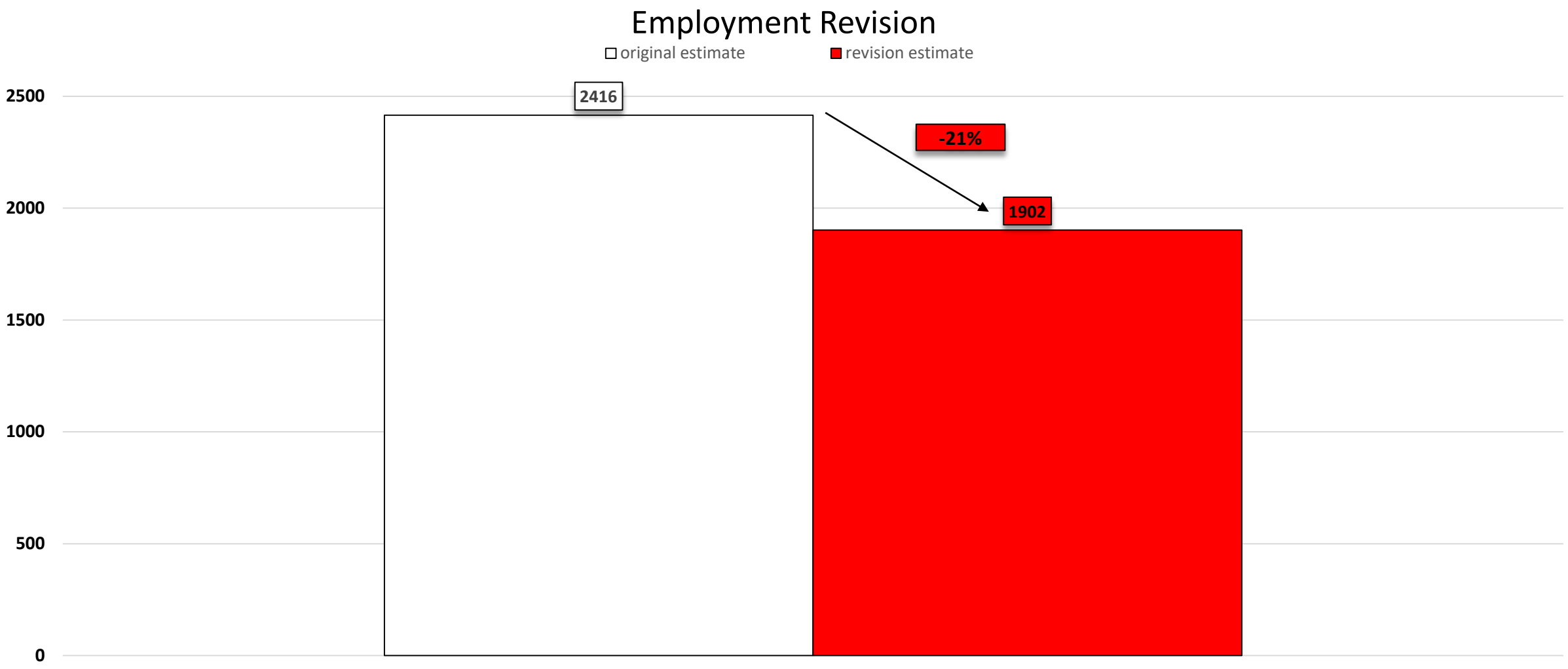

Data Source: Bloomberg, BLS, HEDGEYE

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Housing: Headline Hockey

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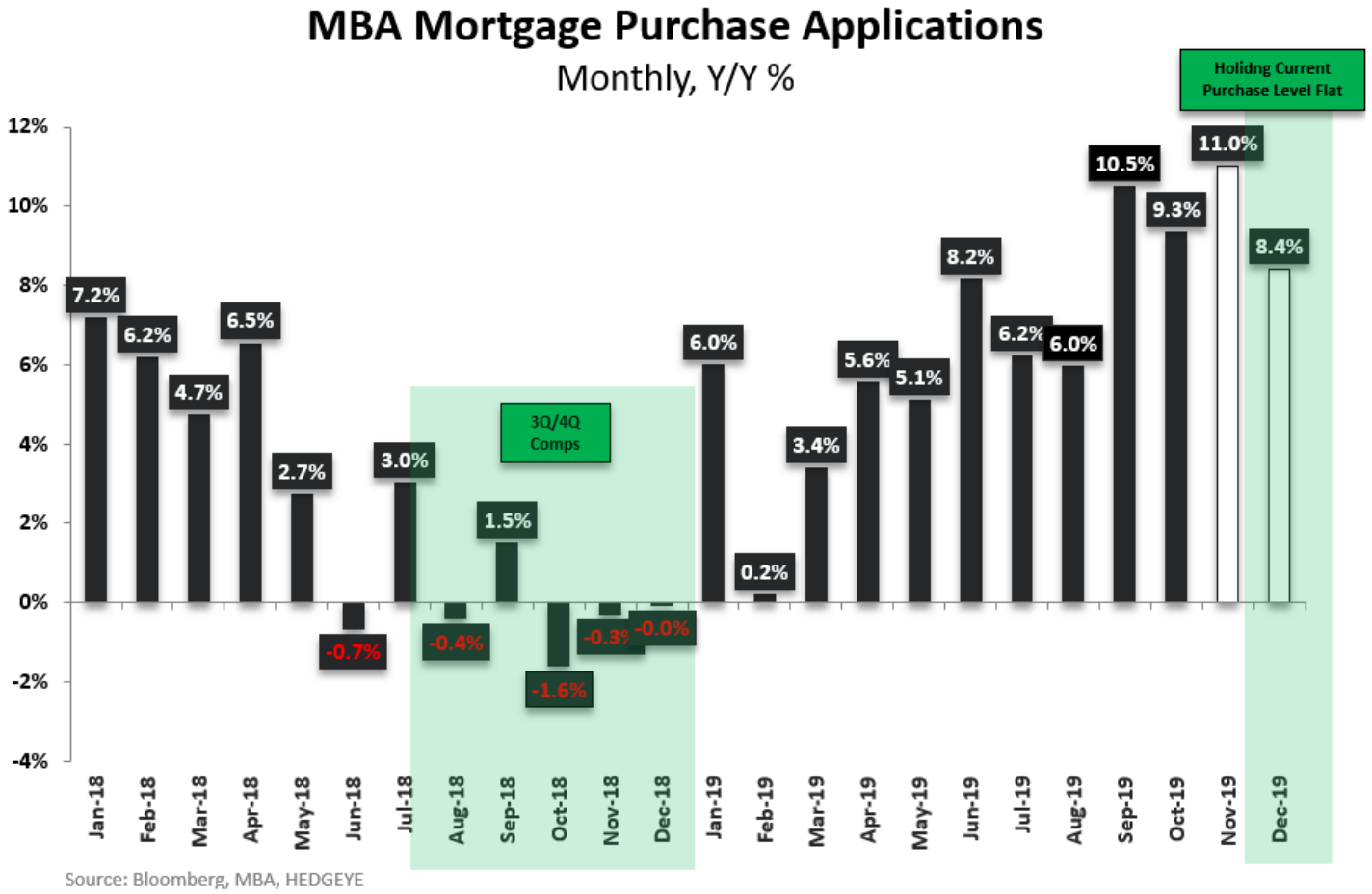
CNBC MARKETS BUSINESS INVESTING TECH POLITICS CNBC TV

REAL ESTATE

Weekly mortgage applications drop 9%



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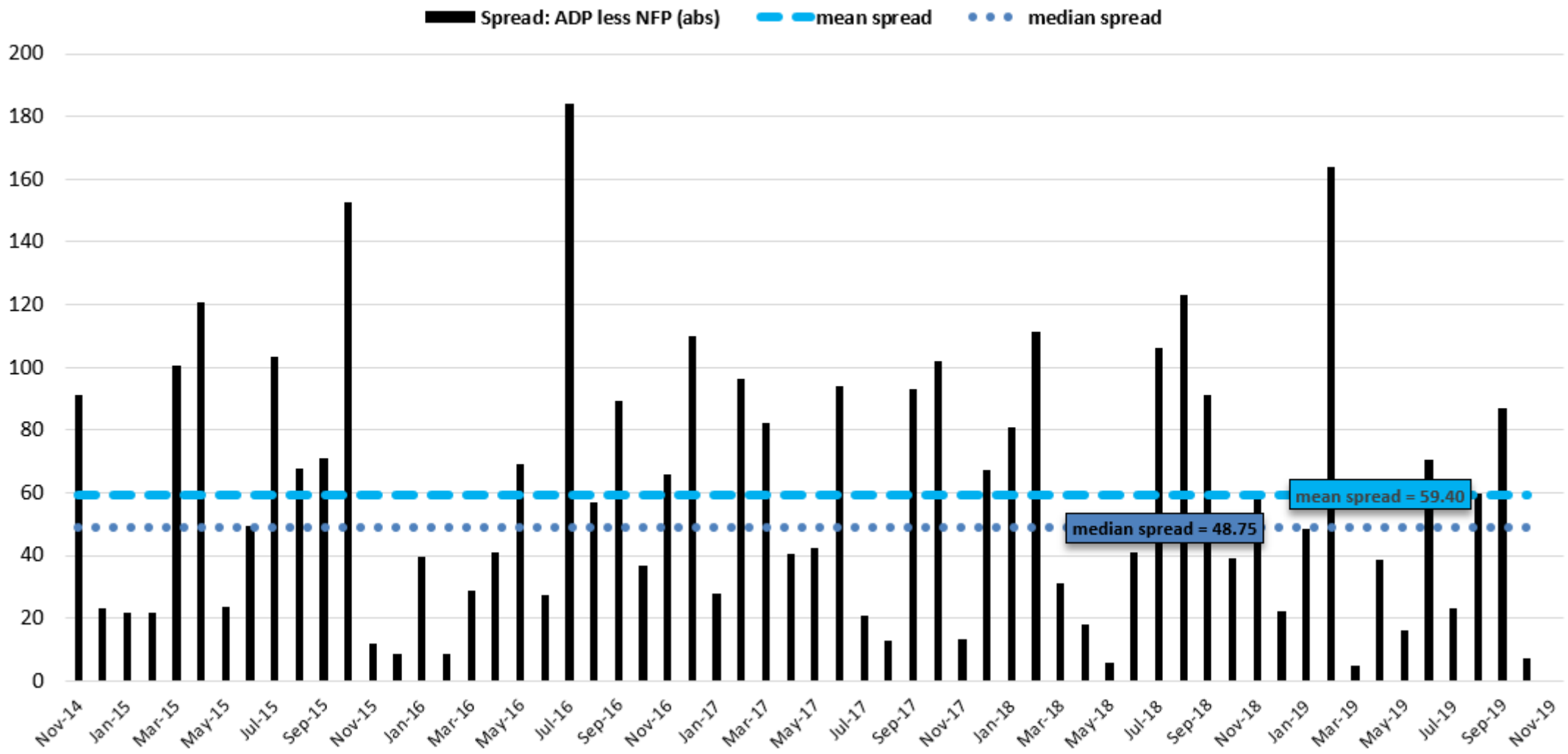
Macro Grind

SPREAD: ADP less NFP



DATA SOURCE: BLOOMBERG

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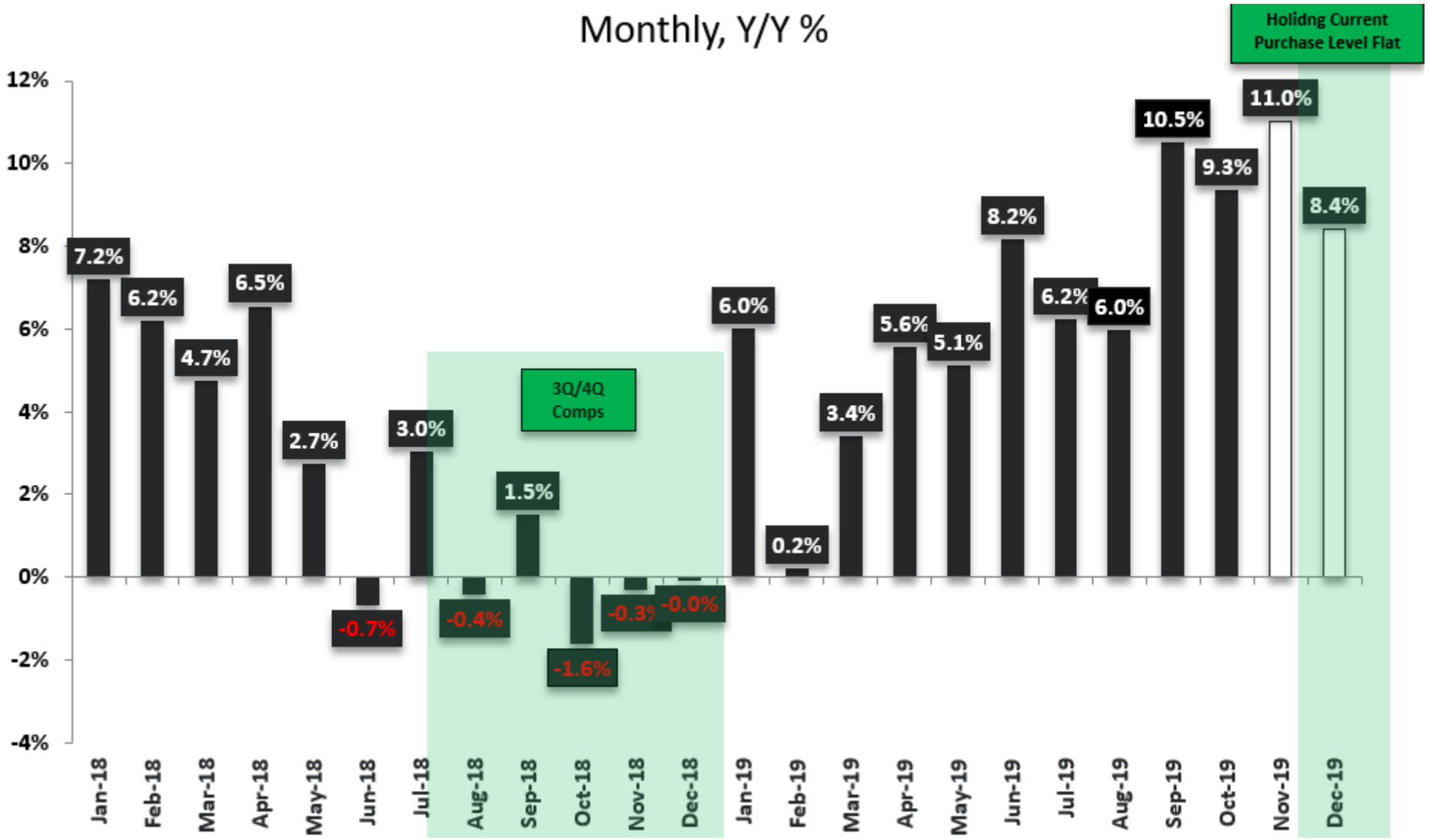
MBA Mortgage Purchase Applications



DATA SOURCE: BLOOMBERG, MBA, Hedgeye

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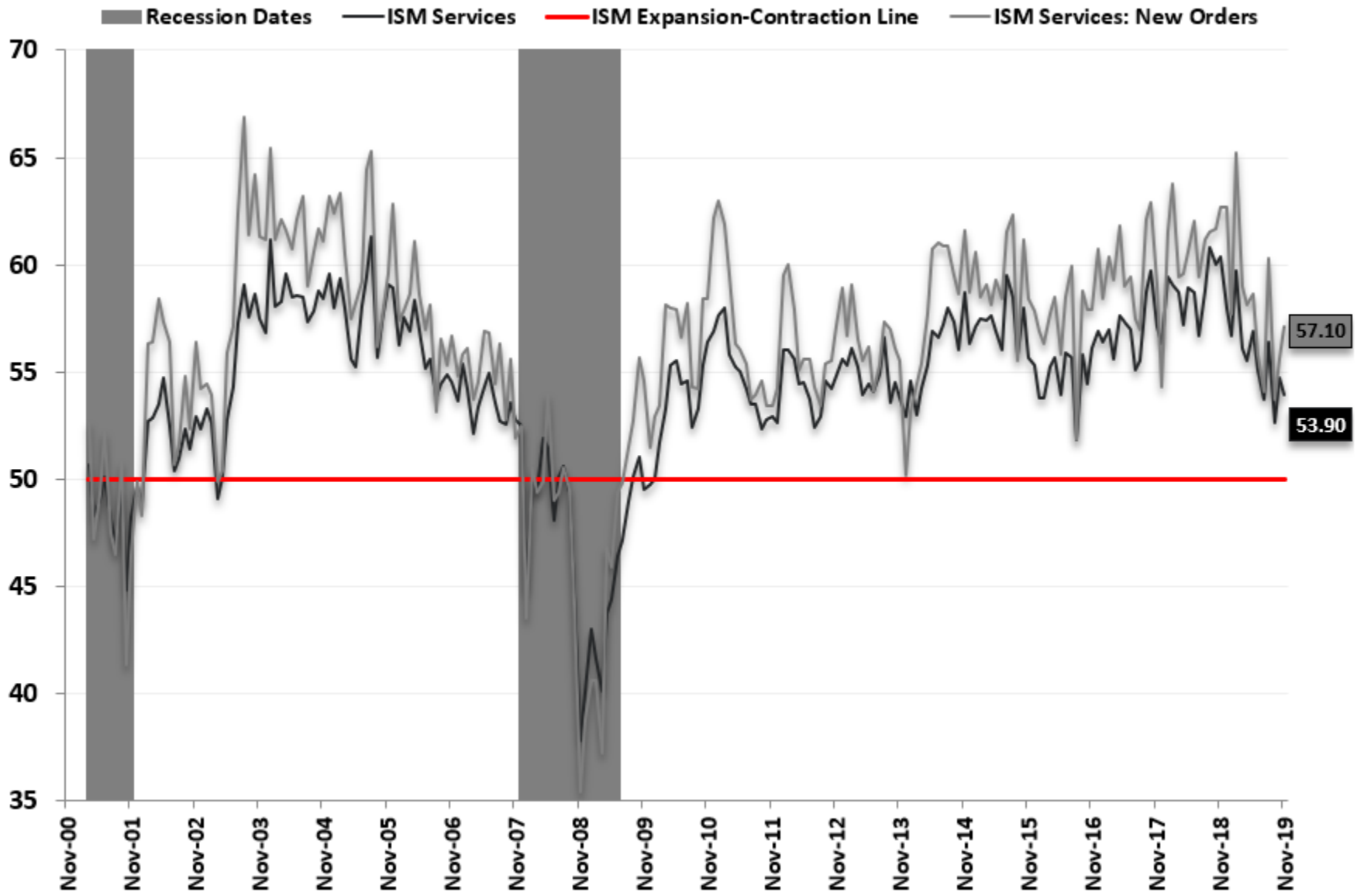
ISM Services



DATA SOURCE: BLOOMBERG, ISM

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ISM NON- MANUFACTURING

HEDGEYE TV

The Macro Show

December 6, 2019

	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	M/M Chg
ISM Non-Manufacturing Index	60.0	60.4	58.0	56.7	59.7	56.1	55.5	56.9	55.1	53.7	56.4	52.6	54.7	53.9	-0.80
Business Activity	62.6	64.3	61.2	59.7	64.7	57.4	59.5	61.2	58.2	53.1	61.5	55.2	57.0	51.6	-5.40
New Orders	61.7	62.7	62.7	57.7	65.2	59.0	58.1	58.6	55.8	54.1	60.3	53.7	55.6	57.1	1.50
Business Employment	58.3	58.0	56.6	57.8	55.2	55.9	53.7	58.1	55.0	56.2	53.1	50.4	53.7	55.5	1.80
Supplier Deliveries	57.5	56.5	51.5	51.5	53.5	52.0	50.5	49.5	51.5	51.5	50.5	51.0	52.5	51.5	-1.00
Business Inventories	56.0	57.5	51.5	49.0	51.0	50.0	51.5	54.0	55.0	50.0	55.0	53.0	50.5	50.5	0.00
Business Backlog	53.5	55.5	50.5	52.5	55.5	56.5	55.0	52.5	56.0	53.5	49.0	54.0	48.5	48.5	0.00
Export Orders	61.0	57.5	59.5	50.5	55.0	52.5	57.0	55.5	55.5	53.5	50.5	52.0	50.0	52.0	2.00
Imports	51.0	54.5	53.5	52.0	48.5	51.5	55.0	50.0	50.0	53.5	50.5	49.0	48.5	45.0	-3.50
Inventory Sentiment	62.0	60.0	59.0	60.5	59.0	62.5	60.0	58.5	58.5	60.5	56.0	58.0	57.0	58.5	1.50
Prices	61.3	64.3	58.0	59.4	54.4	58.7	55.7	55.4	58.9	56.5	58.2	60.0	56.6	58.5	1.90

INDEX & COMPONENT DETAIL

ISM NON-MANUFACTURING INDEX	60.0	60.4	58.0	56.7	59.7	56.1	55.5	56.9	55.1	53.7	56.4	52.6	54.7	53.9
M/M Chg	-0.8	0.4	-2.4	-1.3	3.0	-3.6	-0.6	1.4	-1.8	-1.4	2.7	-3.8	2.1	-0.8
Y/Y Chg	0.3	3.3	1.7	-2.7	0.6	-2.6	-1.7	-2.0	-3.6	-3.0	-2.4	-8.2	-5.3	-6.5
3M Ave	59.9	60.4	59.5	58.4	58.1	57.5	57.1	56.2	55.8	55.2	55.1	54.2	54.6	53.7
6M Ave	59.0	59.2	59.1	59.1	59.3	58.5	57.7	57.2	56.7	56.2	55.6	55.0	54.9	54.4
TTM Ave.	58.6	58.6	58.7	58.7	58.7	58.5	58.3	58.2	58.0	57.6	57.5	57.1	56.6	56.1
Business Activity	62.6	64.3	61.2	59.7	64.7	57.4	59.5	61.2	58.2	53.1	61.5	55.2	57.0	51.6
M/M Chg	-1.5	1.7	-3.1	-1.5	5.0	-7.3	2.1	1.7	-3.0	-5.1	8.4	-6.3	1.8	-5.4
Y/Y Chg	0.8	3.9	2.4	-0.4	2.8	-3.4	0.0	0.0	-4.6	-4.6	0.2	-8.9	-5.6	-12.7
3M Ave	62.7	63.7	62.7	61.7	61.9	60.6	60.5	59.4	59.6	57.5	57.6	56.6	57.9	54.6
TTM Ave.	61.0	61.2	61.3	61.3	61.7	61.3	61.2	61.4	61.1	60.4	60.7	60.2	59.7	58.8
New Orders	61.7	62.7	62.7	57.7	65.2	59.0	58.1	58.6	55.8	54.1	60.3	53.7	55.6	57.1
M/M Chg	0.2	1.0	0.0	-5.0	7.5	-6.2	-0.9	0.5	-2.8	-1.7	6.2	-6.6	1.9	1.5
Y/Y Chg	-1.2	3.6	8.4	-3.8	1.4	-0.4	-1.5	-2.0	-6.2	-5.3	-0.9	-7.8	-6.1	-5.6
3M Ave	61.5	62.0	62.4	61.0	61.9	60.6	60.8	58.6	57.5	56.2	56.7	56.0	56.5	55.5
TTM Ave.	60.5	60.5	60.8	61.1	61.3	61.0	60.9	60.8	60.4	59.8	59.9	59.3	58.9	58.5
Employment	58.3	58.0	56.6	57.8	55.2	55.9	53.7	58.1	55.0	56.2	53.1	50.4	53.7	55.5
M/M Chg	-2.1	-0.3	-1.4	1.2	-2.6	0.7	-2.2	4.4	-3.1	1.2	-3.1	-2.7	3.3	1.8
Y/Y Chg	2.2	2.9	0.1	-2.7	0.1	-0.4	-1.3	2.9	0.6	-0.4	-3.7	-10.0	-4.6	-2.5
3M Ave	58.5	58.9	57.6	57.5	56.5	56.3	54.9	55.9	55.6	56.4	54.8	53.2	52.4	53.2
TTM Ave.	56.6	56.8	56.9	57.0	56.6	56.7	56.5	56.7	56.7	56.8	56.5	56.1	55.5	55.3
Supplier Deliveries	57.5	56.5	51.5	51.5	53.5	52.0	50.5	49.5	51.5	51.5	50.5	51.0	52.5	51.5
M/M Chg	0.5	-1.0	-5.0	0.0	2.0	-1.5	-1.5	-1.0	2.0	0.0	-1.0	0.5	1.5	-1.0
Y/Y Chg	-0.5	2.5	-4.0	-4.0	-2.0	-6.5	-4.0	-9.0	-4.0	-1.5	-5.5	-6.0	-5.0	-5.0
3M Ave	56.8	57.0	55.2	53.2	52.2	52.3	52.0	50.7	50.5	50.8	51.2	51.0	51.3	51.7
TTM Ave.	56.1	56.0	55.8	55.5	55.3	55.0	54.4	54.0	53.5	53.2	53.0	52.6	52.3	51.8
Business Inventories	56.0	57.5	51.5	49.0	51.0	50.0	51.5	54.0	55.0	50.0	55.0	53.0	50.5	50.5
M/M Chg	1.5	1.5	-6.0	-2.5	2.0	-1.0	1.5	2.5	1.0	-5.0	5.0	-2.0	-2.5	0.0
Y/Y Chg	3.5	3.0	-2.0	0.0	-2.5	-3.5	-5.5	-3.5	1.5	-3.5	1.5	-1.5	-5.5	-7.0
3M Ave	54.7	56.0	55.0	52.7	50.5	50.0	50.8	51.8	53.5	53.0	53.3	52.7	52.8	51.3
TTM Ave.	54.0	54.4	54.2	53.8	54.0	53.7	53.5	53.3	53.1	52.8	53.0	52.9	52.6	52.2

DATA SOURCE: BLOOMBERG, ISM, HRM

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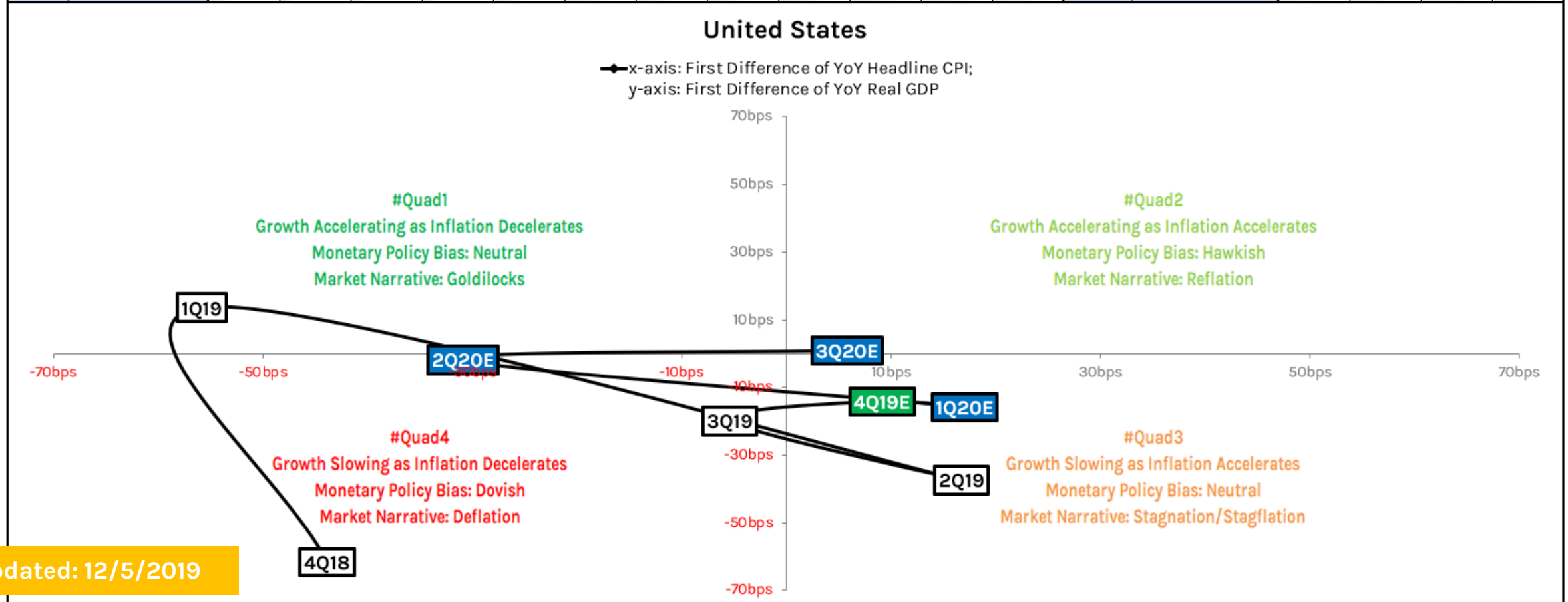
Our Research Process is REPEATABLE

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%	2.10%	Real GDP QoQ SAAR	0.53%	2.44%	1.93%	2.15%
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%	2.08%	Real GDP YoY	1.94%	1.78%	1.76%	1.77%
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%	2.61%
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	1.85%	2.02%	1.71%	1.77%
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%



Updated: 12/5/2019

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

HEDGEYE

#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, Cyclicals, 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 Underweights(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

DATA SOURCE: BLOOMBERG

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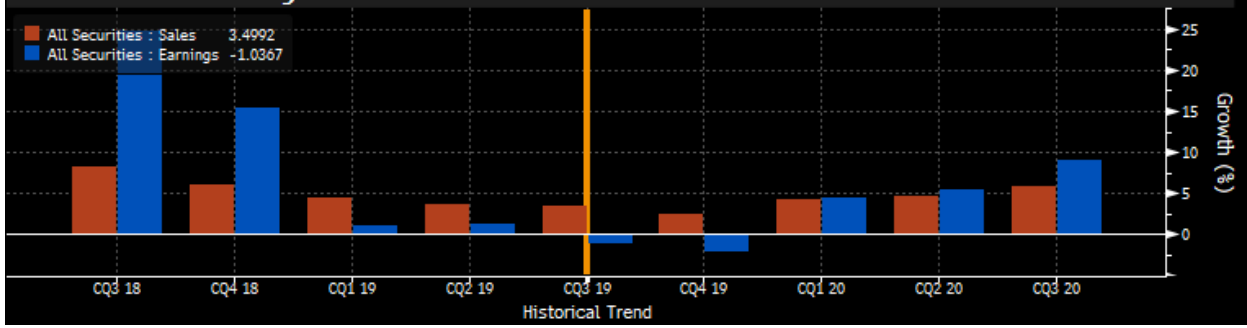
S&P 500 Sales & Earnings Growth

S&P 500 INDEX — Range CQ3 Ending: 8/16/2019 - 11/15/2019

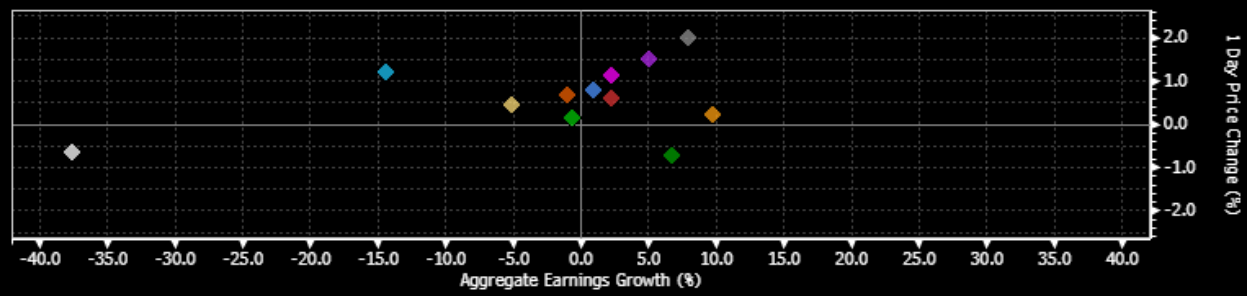
Surprise | Growth

	Sector (GICS)	Reported	Sales Growth	Earnings Growth
11)	All Securities	499 / 500	3.50%	-1.04%
12)	> Energy	28 / 28	-8.06%	-37.60%
13)	> Materials	28 / 28	-17.71%	-14.40%
14)	> Industrials	69 / 69	-0.83%	2.28%
15)	> Consumer Discretionary	63 / 63	6.49%	-0.65%
16)	> Consumer Staples	33 / 33	3.24%	2.27%
17)	> Health Care	60 / 60	14.99%	7.97%
18)	> Financials	68 / 68	3.52%	0.91%
19)	> Information Technology	68 / 69	1.65%	-5.18%
20)	> Communication Services	22 / 22	9.50%	5.02%
21)	> Utilities	28 / 28	0.47%	9.68%
22)	> Real Estate	32 / 32	5.14%	6.70%

Historical Analysis



Price Reaction



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Sector Performance

SECTOR	Ticker	Price	1-Day % Chg	MTD % Chg	QTD % Chg	YTD % Chg
Consumer Discretionary	XLY	$120.77	-0.10%	-1.37%	0.06%	21.98%
Financial Select Sector	XLF	$29.96	0.47%	-0.63%	7.00%	25.78%
Health Care Select Sector	XLV	$99.75	0.00%	0.26%	10.67%	15.30%
Technology Select Sector	XLK	$86.80	0.37%	-1.54%	7.79%	40.05%
Consumer Staples Select Sector	XLP	$62.43	-0.03%	0.69%	1.64%	22.94%
Industrial Select Sector	XLI	$80.14	0.02%	-2.32%	3.23%	24.42%
Materials Select Sector	XLB	$59.49	0.51%	-0.92%	2.22%	17.76%
The Energy Select Sector	XLE	$58.60	-0.48%	-0.49%	-1.01%	2.18%
Utilities Select Sector	XLU	$63.40	0.17%	0.56%	-2.07%	19.80%
Real Estate Select Sector	XLRE	$38.51	0.16%	-0.36%	-2.11%	24.23%
Communications Services Sector	XLC	$52.45	0.42%	-0.21%	5.92%	27.06%
S&P 500	SPX	3,117.43	0.15%	-0.75%	4.73%	24.36%

DATA SOURCE: BLOOMBERG, HEDGEYE

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Sector Relative Performance

	Ticker	Price	1-Day % Chg	MTD % Chg	QTD % Chg	YTD % Chg
Consumer Discretionary	XLY	$120.77	-0.25%	-0.62%	-4.67%	-2.38%
Financial Select Sector	XLF	$29.96	0.32%	0.12%	2.27%	1.42%
Health Care Select Sector	XLV	$99.75	-0.15%	1.01%	5.95%	-9.05%
Technology Select Sector	XLK	$86.80	0.22%	-0.79%	3.06%	15.69%
Consumer Staples Select Sector	XLP	$62.43	-0.18%	1.44%	-3.08%	-1.41%
Industrial Select Sector	XLI	$80.14	-0.13%	-1.57%	-1.49%	0.07%
Materials Select Sector	XLB	$59.49	0.36%	-0.17%	-2.51%	-6.60%
The Energy Select Sector	XLE	$58.60	-0.63%	0.26%	-5.74%	-22.18%
Utilities Select Sector	XLU	$63.40	0.02%	1.30%	-6.80%	-4.55%
Real Estate Select Sector	XLRE	$38.51	0.01%	0.39%	-6.84%	-0.13%
Communications Services Sector	XLC	$52.45	0.27%	0.54%	1.19%	2.70%

DATA SOURCE: BLOOMBERG, HEDGEYE

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Market Share Volume & Total Value Traded

INDEX/SECURITY	VOLUME: (12/5) vs.			
	Prior Day	1M Ave	3M ave	1Y Ave
Total Market Volume*	5%	6%	-2%	-15%
Total Exchange Volume**	-8%	-4%	-4%	-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)

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Style Factor Performance

	FACTOR	1D % Chg	1W % Chg	1M % Chg	3M % Chg	6M % Chg	YTD % Chg
Debt	High Debt/EV	0.0%	-1.4%	-0.9%	4.9%	6.7%	20.0%
	Low Debt/EV	0.0%	-1.4%	2.0%	4.6%	8.4%	27.3%
SI	High Short Interest	0.0%	-1.7%	-0.6%	6.1%	4.1%	14.4%
	Low Short Interest	0.2%	-1.1%	1.8%	3.5%	9.0%	27.5%
BETA	High Beta	0.1%	-2.0%	-0.4%	8.6%	7.6%	18.4%
	Low Beta	0.1%	-0.3%	1.7%	-0.3%	5.1%	23.3%
YIELD	High Yield	0.0%	-1.6%	-2.1%	3.2%	2.4%	10.0%
	Low Yield	0.0%	-1.5%	2.8%	6.9%	10.0%	30.7%
MKT CAP	MCAP Bottom 25%	0.3%	-1.6%	-2.2%	5.4%	2.2%	11.1%
	MCAP Top 25%	0.1%	-1.2%	2.0%	5.0%	12.0%	26.9%
Sales	Top 25% Sales Growth	0.0%	-1.3%	2.1%	4.8%	10.4%	30.6%
	Bottom 25% Sales Growth	0.2%	-1.3%	-0.6%	7.0%	5.6%	14.7%
EPS	Top 25% EPS Growth	0.1%	-1.4%	0.3%	3.5%	10.7%	29.1%
	Bottom 25% EPS Growth	0.2%	-1.4%	-0.9%	4.0%	3.6%	12.2%

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

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Rates & Spreads

	Price	1D Bps Chg	5D Bps Chg	1M Bps Chg	3M Bps Chg	vs. 52-Wk, Bps High	vs. 52-Wk, Bps Low	vs. 3Y Ave	vs. 5Y Ave
3M T-Bill	1.51%	-1.0	-4.2	-2	-42	-97	1	-12	47
3M LIBOR	1.89%	0.0	-1.8	-2	-25	-94	0	-6	52
2Y T-Note	1.59%	2.0	-2.0	-2	5	-122	23	-36	12
5Y T-Note	1.62%	3.3	0.7	0	20	-118	32	-58	-27
10Y T-Note	1.80%	3.6	3.5	-2	25	-112	37	-67	-47
30Y T-Note	2.25%	3.2	5.4	-6	23	-94	35	-63	-56
2Y-10Y Spread, Bps	21.16	1.0	4.8	-0.8	19	10	14	-31	-60
IG SPREAD (AAABBB)	1.38%	0.0	0.0	-4	-10	-51	3	-10	-24
HIGH YIELD	5.58%	-5.0	-1.0	-4	-8	-254	15	-50	-91
5Y BREAKEVEN	1.57%	0.8	4.1	-2.3	19.9	-35.2	31.9	-23.8	-7.8

DATA SOURCE: BLOOMBERG

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Key $USD Correlations

						52-Wk Rolling 30D Correlation			
METRIC	15D	30D	90D	120D	180D	High	Low	% Time Pos	% Time Neg
SPX	0.65	0.61	-0.17	0.01	0.21	*0.77*	*-0.78*	*51%*	*49%*
BRENT Oil	0.27	0.54	-0.01	-0.33	-0.24	*0.79*	*-0.59*	*52%*	*48%*
CRB Index	0.10	-0.12	-0.47	-0.33	-0.61	*0.71*	*-0.77*	*31%*	*69%*
GOLD	-0.84	-0.87	0.12	0.61	0.47	*0.42*	*-0.91*	*28%*	*72%*

**Days = Trading Days*

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CFTC Non-Commercial Net Long Positioning

HEDGEYE TV

The Macro Show

December 6, 2019

CFTC NON-COMMERCIAL NET LONG POSITIONING

	METRIC	Latest	W/W Chg	3M Ave	6M Ave	1Y Ave	3Y Max	3Y Min	Z-Score 1Y	Z-Score 3Y
EQUITIES	SPX (Index + E-mini)	(9,383)	(7,727)	16,743	34,668	29,936	249,638	(128,189)	-0.58X	-1.24X
	VIX	(210,699)	7,663	(160,135)	(133,667)	(101,373)	92,913	(218,362)	-1.59X	-1.76X
	Russell 2000 (mini)	8,299	10,331	(23,523)	(45,598)	(43,796)	161,909	(117,878)	1.56X	0.30X
	Dow Jones (mini)	30,843	(377)	39,121	37,697	28,933	95,976	(282)	0.16X	-0.50X
	Nasdaq (mini)	34,947	(1,224)	31,727	28,557	11,595	113,412	(24,815)	1.20X	0.16X
	Nikkei Index	(7,092)	(662)	(8,142)	(7,698)	(10,061)	14,214	(16,298)	0.86X	-0.70X
RATES	10Y UST	(123,098)	56,902	(204,099)	(277,941)	(244,915)	372,991	(758,490)	1.19X	0.26X
	2Y UST	(290,381)	(5,789)	(198,739)	(235,360)	(217,210)	67,767	(421,551)	-0.72X	-1.14X
	5Y UST	(241,345)	23,625	(164,584)	(119,033)	(142,335)	6,400	(866,140)	-1.16X	0.34X
	UST Bonds	(49,006)	(1,569)	(60,036)	(45,810)	(41,703)	122,839	(142,810)	-0.43X	-0.77X
	30D Fed Funds	312,410	18,983	188,620	61,148	(37,185)	312,410	(286,025)	2.36X	2.74X
	Eurodollar	1,336,648	10,356	1,320,620	1,117,863	214,785	1,503,625	(3,110,209)	1.06X	2.01X
CURRENCIES	$USD	24,129	(492)	33,341	30,604	30,846	56,635	(10,666)	-1.38X	0.08X
	JPY	(43,065)	(6,306)	(5,680)	(3,989)	(36,862)	32,039	(140,151)	-0.15X	0.40X
	EUR	(60,784)	(580)	(65,880)	(58,304)	(67,576)	147,318	(116,607)	0.30X	-0.87X
	GBP	(37,878)	(6,434)	(61,020)	(69,314)	(49,348)	49,216	(113,271)	0.39X	-0.07X
	AUD	(47,547)	1,301	(46,843)	(52,314)	(49,244)	77,969	(74,181)	0.17X	-0.80X
	CAD	20,045	(9,875)	22,034	14,405	(15,255)	78,001	(99,736)	1.05X	0.66X
	MXN	136,132	(4,228)	116,570	116,414	103,501	156,013	(73,499)	0.77X	1.28X
	NZD	(35,811)	(725)	(37,226)	(28,247)	(16,067)	35,981	(42,544)	-1.33X	-1.55X
	CHF	(21,457)	(4,947)	(11,650)	(12,333)	(20,057)	6,572	(47,216)	-0.14X	-0.21X
COMMODITIES	CRUDE OIL	477,604	38,643	427,612	426,426	429,628	784,290	332,714	0.80X	-0.35X
	GOLD	205,634	(20,054)	239,853	238,289	138,751	292,066	(103,009)	0.65X	1.04X
	COPPER	(37,679)	(4,068)	(38,411)	(38,213)	(20,258)	67,602	(60,135)	-0.77X	-1.64X
	Natural Gas	(188,289)	(46,700)	(154,656)	(165,721)	(95,079)	57,455	(216,003)	-1.22X	-1.93X
	RBOB Gasoline	87,814	9,169	65,004	69,591	78,485	114,862	29,519	0.71X	0.55X
	ULSD Heating Oil	4,916	5,231	(1,916)	(3,956)	(7,922)	67,696	(25,442)	1.72X	-0.64X
	Silver	53,348	6,407	54,791	47,756	34,577	107,003	(30,158)	0.73X	0.60X
	Platinum	44,777	3,025	36,628	26,127	21,182	45,870	(11,540)	1.84X	1.72X
	Aluminum	163,475	(2,043)	159,128	161,536	157,727	168,292	122,356	0.55X	1.31X
	Nickel	42,230	(365)	42,658	44,026	37,006	47,708	13,508	0.60X	1.21X
	Corn	(76,261)	19,064	(75,348)	55,423	9,516	372,754	(270,560)	-0.53X	-0.73X
	Soybeans	(19,516)	(60,864)	26,297	210	(21,749)	210,365	(148,817)	0.04X	-0.43X
	Wheat	18,115	13,210	4,887	15,160	(8,077)	63,219	(143,292)	0.85X	1.01X
	Live Cattle	100,621	82	53,828	54,826	96,824	183,134	19,421	0.08X	-0.03X
	Lean Hogs	26,443	(9,969)	48,665	58,700	53,490	97,769	(11,151)	-0.99X	-0.61X
	Sugar	(87,467)	17,398	(163,941)	(122,150)	(79,350)	213,702	(205,161)	-0.12X	-0.64X
	Cotton	(357)	8,689	(10,509)	(19,979)	(2,874)	132,318	(37,827)	0.10X	-1.15X
	Coffee	11,222	13,399	(29,689)	(24,710)	(41,108)	34,722	(106,651)	2.46X	1.39X
	Cocoa	67,081	4,912	25,043	28,754	15,768	67,081	(43,846)	2.08X	2.18X
	Orange Juice	(6,156)	230	(6,099)	(6,489)	(7,010)	8,759	(9,416)	0.76X	-0.87X

DATA SOURCE: BLOOMBERG

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Volatility

TIME WINDOW SETTING: VOLATILITY_30D PUT_IMP_VOL_30D	TICKER	TOTAL RETURN PERFORMANCE YTD %	IVOL PREMIUM/DISCOUNT IVOL PREM % IVOL / RVOL CURRENT	Yesterday	1W Ago	1M Ago	TTM Z-Score	3Yr Z-Score	REALIZED VOLATILITY TRENDS RVOL CURRENT	MM %	PERCENTILE 10YR	IMPLIED VOLATILITY TRENDS IVOL CURRENT	MM %	PERCENTILE 10YR
US EQUITIES														
Technology Sector SPDR ETF	XLK US EQUITY	41.44%	34%	43%	-23%	-11%	1.0	0.7	11.0	-38%	20%	14.7	-7%	41%
Power Shares QQQ Trust ETF	QQQ US EQUITY	32.28%	75%	71%	32%	-4%	2.5	2.1	8.9	-40%	7%	15.5	9%	47%
Communication Services SPDR ETF	XLC US EQUITY	27.89%	95%	76%	31%	1%	3.4		8.0	-48%	0%	15.5	1%	15%
Financials Sector SPDR ETF	XLF US EQUITY	27.71%	63%	61%	46%	-11%	2.2	2.2	9.3	-43%	4%	15.2	6%	31%
Vanguard Real Estate REIT ETF	VNQ US EQUITY	27.37%	-11%	-9%	-18%	40%	-0.7	-0.7	12.2	44%	32%	10.8	-9%	11%
SPDR S&P 500 ETF Trust	SPY US EQUITY	26.59%	83%	84%	61%	-15%	2.5	2.3	6.7	-46%	7%	12.2	16%	39%
Industrials Sector SPDR ETF	XLI US EQUITY	26.36%	27%	34%	21%	-16%	0.9	0.6	11.6	-29%	25%	14.8	7%	44%
Consumer Staples Sector SPDR ETF	XLP US EQUITY	25.29%	350%	107%	146%	26%	5.3	7.7	6.4	-41%	4%	28.9	112%	99%
Consumer Discretionary Sector SPDR ETF	XLY US EQUITY	23.23%	50%	118%	88%	4%	1.4	1.1	9.1	-20%	11%	13.6	15%	36%
Utilities Sector SPDR ETF	XLU US EQUITY	22.59%	-18%	-18%	-18%	8%	-0.8	-1.0	11.2	4%	32%	9.2	-21%	2%
I-Shares Russell 2000 ETF	IWM US EQUITY	21.37%	42%	45%	21%	-6%	2.1	1.5	10.8	-25%	7%	15.4	13%	27%
Materials Sector SPDR ETF	XLB US EQUITY	19.57%	80%	59%	27%	-15%	2.7	2.8	10.2	-35%	8%	18.3	38%	59%
Health Care Sector SPDR ETF	XLV US EQUITY	16.70%	28%	12%	4%	-7%	1.0	0.6	10.1	-27%	24%	13.0	1%	38%
Energy Sector SPDR ETF	XLE US EQUITY	4.87%	11%	88%	-15%	-17%	0.7	0.3	20.0	-9%	58%	22.3	22%	67%
INTERNATIONAL EQUITIES														
Euro Stoxx 50 Index	SX5E INDEX	25.94%	39%	37%	85%	-25%	1.5	0.7	9.7	-36%	7%	13.5	19%	20%
I-Shares MSCI Japan ETF	EWJ US EQUITY	19.38%	44%	43%	46%	-9%	2.2	1.4	7.4	-33%	4%	10.6	6%	10%
I-Shares MSCI Emerging Markets ETF	EEM US EQUITY	10.46%	24%	29%	28%	25%	0.7	0.9	11.4	-8%	6%	14.2	-9%	10%
I-Shares China Large-Cap ETF	FXI US EQUITY	5.71%	1%	8%	16%	16%	-0.4	-0.2	15.9	8%	12%	16.0	-6%	6%
CURRENCIES														
PowerShares US Dollar Index ETF	UUP US EQUITY	4.83%	65%	60%	39%	33%	0.5	1.0	3.1	-31%	1%	5.1	-15%	3%
Currency Shares British Pound ETF	FXB US EQUITY	3.16%	113%	107%	128%	-4%	3.6	4.9	5.2	-54%	8%	11.1	1%	83%
Currency Shares Japanese Yen ETF	FXY US EQUITY	0.28%	3%	10%	1%	-1%	-0.3	-0.3	4.7	-8%	5%	4.8	-4%	1%
Currency Shares Euro Trust ETF	FXE US EQUITY	-3.82%	19%	16%	17%	15%	0.9	1.0	3.8	-12%	3%	4.5	-8%	1%
COMMODITIES														
United States Oil Fund ETF	USO US EQUITY	26.19%	4%	10%	20%	34%	0.1	0.1	27.9	15%	53%	29.1	-10%	49%
SPDR Gold Shares ETF	GLD US EQUITY	14.64%	-1%	-2%	-8%	-8%	0.0	-0.4	10.0	-14%	18%	9.9	-8%	11%
PowerShares DB Agriculture Fund ETF	DBA US EQUITY	-4.43%	48%	44%	54%	53%	0.7	0.8	7.8	-5%	8%	11.5	-8%	9%
United States Natural Gas Fund ETF	UNG US EQUITY	-25.05%	18%	21%	27%	57%	0.3	0.3	46.2	30%	80%	54.3	-3%	93%
FIXED INCOME														
I-Shares 20+ Year Treasury Bond ETF	TLT US EQUITY	17.00%	-21%	-22%	-16%	-16%	-1.0	-1.5	15.1	14%	72%	12.0	8%	42%
I-Shares IBOXX IG Corporate Bond ETF	LQD US EQUITY	16.86%	-16%	-19%	-11%	-1%	-0.9	-1.4	6.2	22%	79%	5.2	4%	42%
I-Shares J.P. Morgan USD EM Bond ETF	EMB US EQUITY	12.53%	7%	14%	12%	8%	0.4	-0.4	4.9	-6%	34%	5.3	-7%	14%
I-Shares IBOXX HY Corporate Bond ETF	HYG US EQUITY	12.22%	34%	50%	30%	10%	0.7	0.5	3.3	-15%	12%	4.4	3%	13%
I-Shares 7-10 Year Treasury Bond ETF	IEF US EQUITY	8.94%	-2%	-13%	1%	-16%	-0.3	-0.4	6.2	6%	67%	6.1	23%	52%

Data Source: CBOE, CME, Bloomberg

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