

THE
MACRO
SHOW

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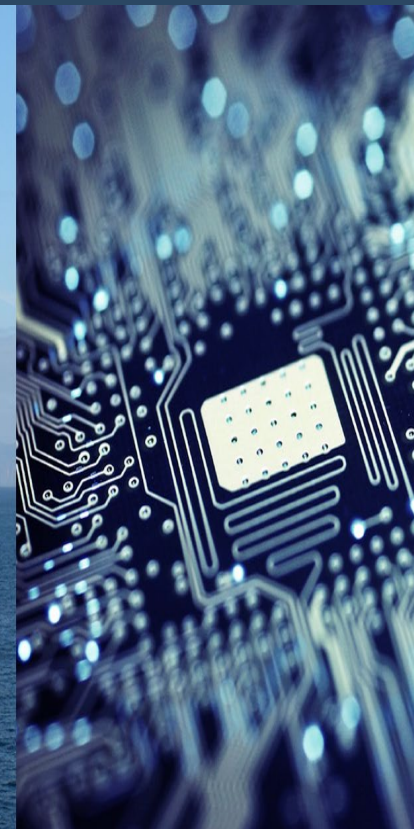
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OVERSOLD



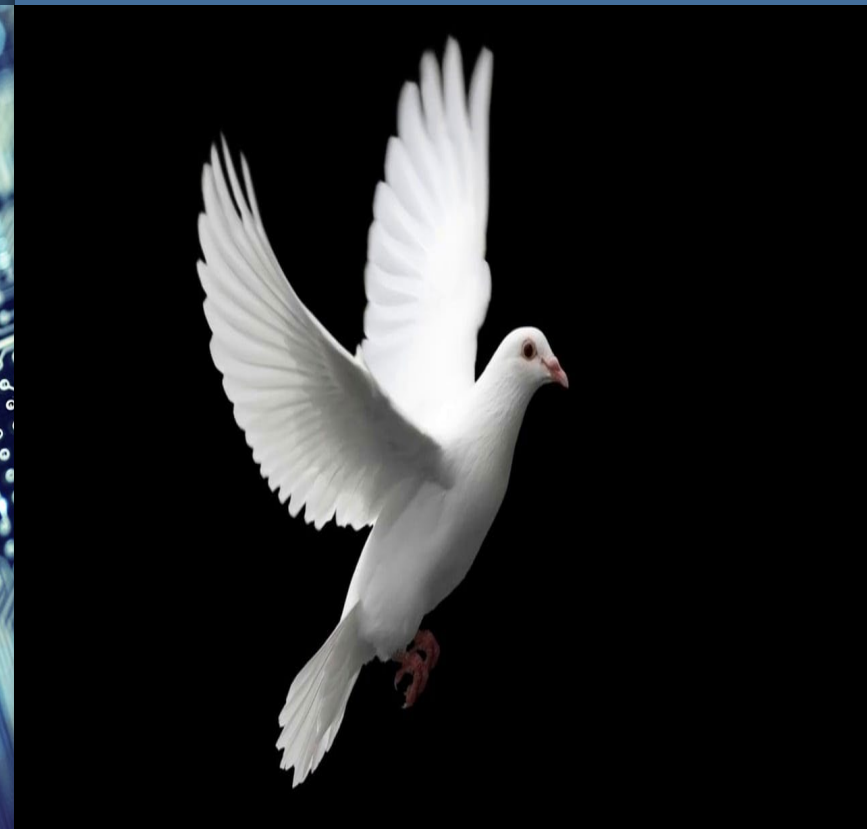
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SECTORS



3

UST 10YR YIELD



1 OVERSOLD

While we haven't had many immediate-term TRADE #oversold signals within glaringly *Bearish @Hedgeye TRENDS*, we registered plenty of them into yesterday's U.S. stock market close. The NASDAQ (down -16.7% since AUG) and SPX (down -13.1% since SEP) both registered oversold signals inasmuch as WTI Crude Oil is signaling oversold at the low-end of the @Hedgeye Risk Range this morning as well.

2 SECTORS

Since they finally just dumped everything into the bell yesterday (including the winning Sector Styles during *Quad 4* like Utes, REITS, and Staples), that's where we would be a buyer this morning – not in our *Top 3 Sector Shorts* (which are the worst performing Sectors in Q418) as the bounces will continue to be sold in Tech (XLK), Energy (XLE), and Industrials (XLI).

3 UST 10YR YIELD

That's one big thing that isn't yet signaling immediate-term TRADE #oversold, but it's down another -3bps this morning and -24bps in the last month alone to 2.83% with the low-end of the @Hedgeye Risk Range at 2.79% ahead of a Fed rate hike that should be a *Dovish Hike*, but how dovish can Powell get without looking politicized? We're at full employment with #accelerating Wage Inflation, don't forget.



Alec Richards

Energy

HEDGEYE ENERGY POSITION MONITOR

BEST IDEAS - LONG

Active Longs

RRC	Range Resources Corp.
CNQ	Canadian Natural Resources
AR	Antero Resources Corp.
VPK-NL	Royal Vopak N.V.

Long Bench or Bias

ET	Energy Transfer LP
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BEST IDEAS - SHORT

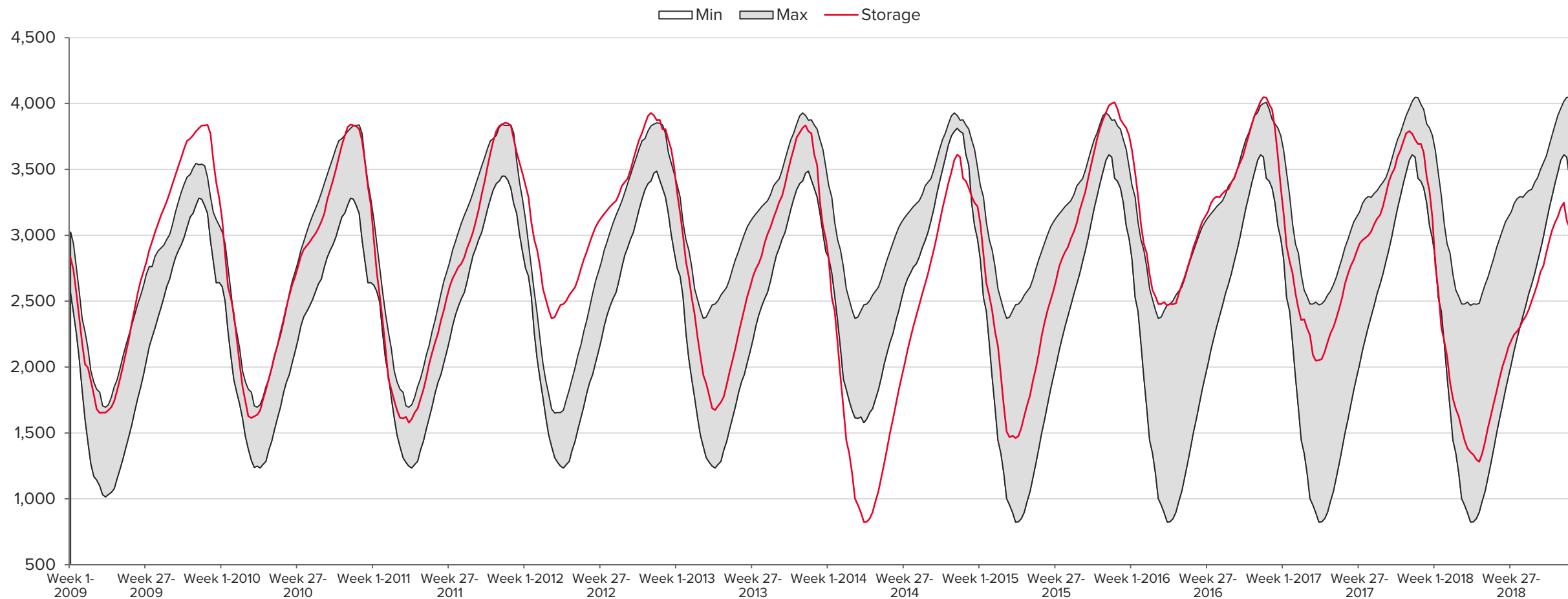
Active Shorts

TGE	Tallgrass Energy LP
AMGP	Antero Midstream GP LP
TUSK	Mammoth Energy Services
GEL	Genesis Energy
MIC	Macquarie Infrastructure

Short Bench or Bias

AM	Antero Midstream Partners LP
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RRC: NATURAL GAS INVENTORIES

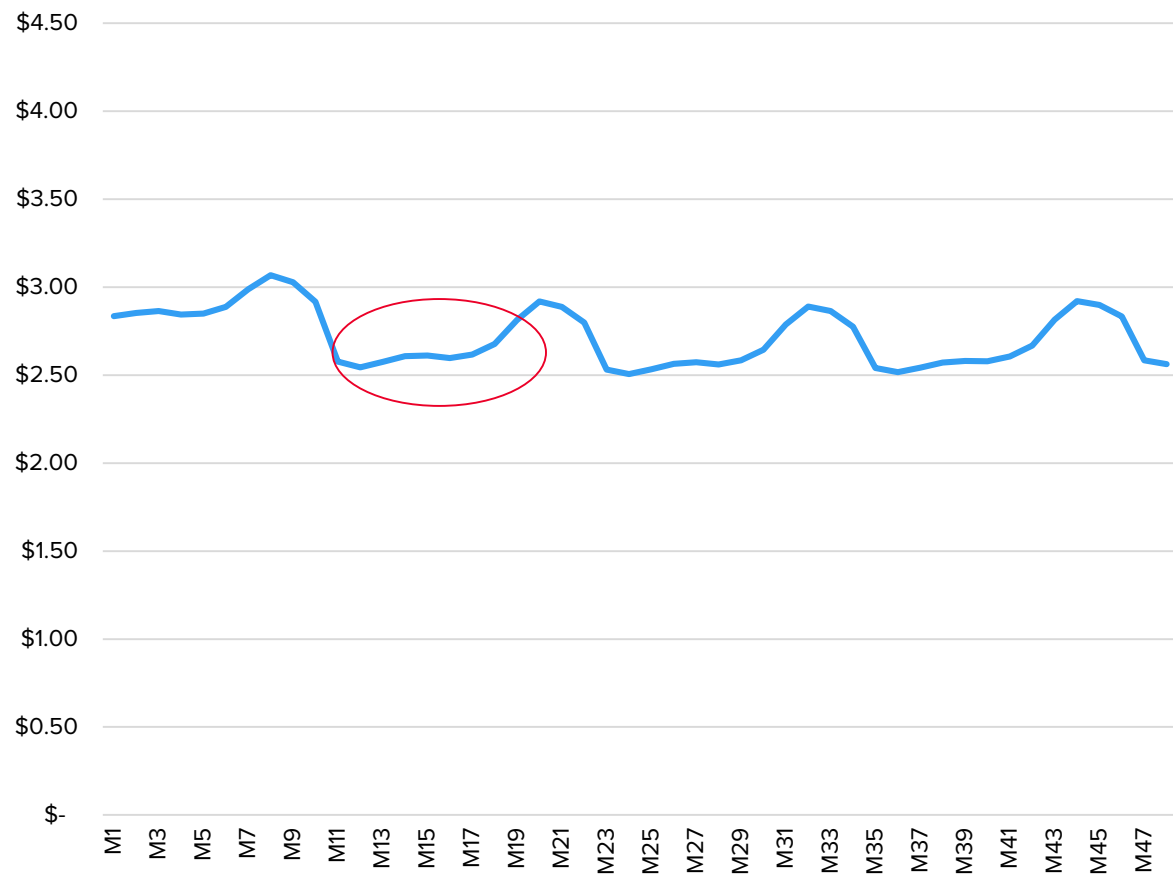


BULLISH NEAR TERM FUNDAMENTALS

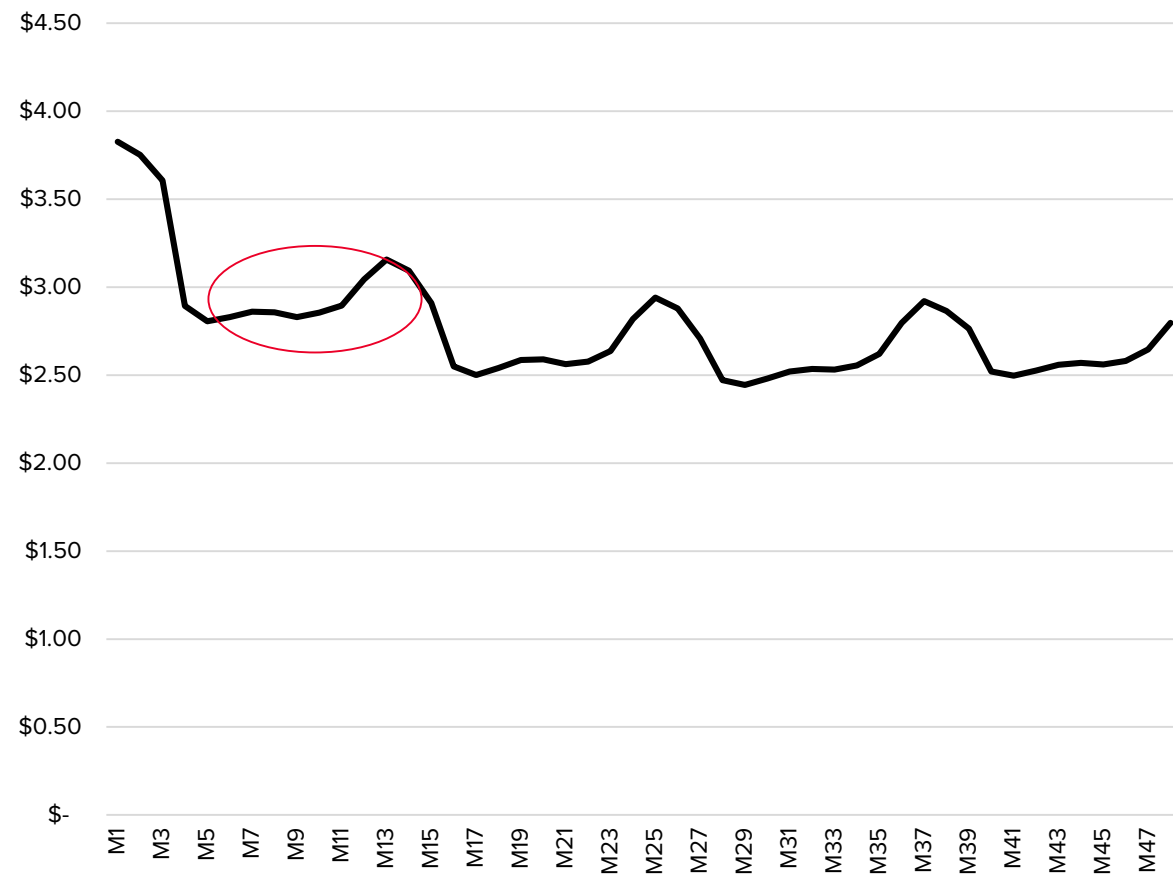
Natural gas storage inventories are ~20% lower than the 5yr average. The last time inventories were this low was pre-shale. Near term price support has been overshadowed by the consensus supply story.

RRC: NATURAL GAS FUTURES

Natural Gas Futures Curve 5/15/2018



Natural Gas Futures Curve 12/14/2018

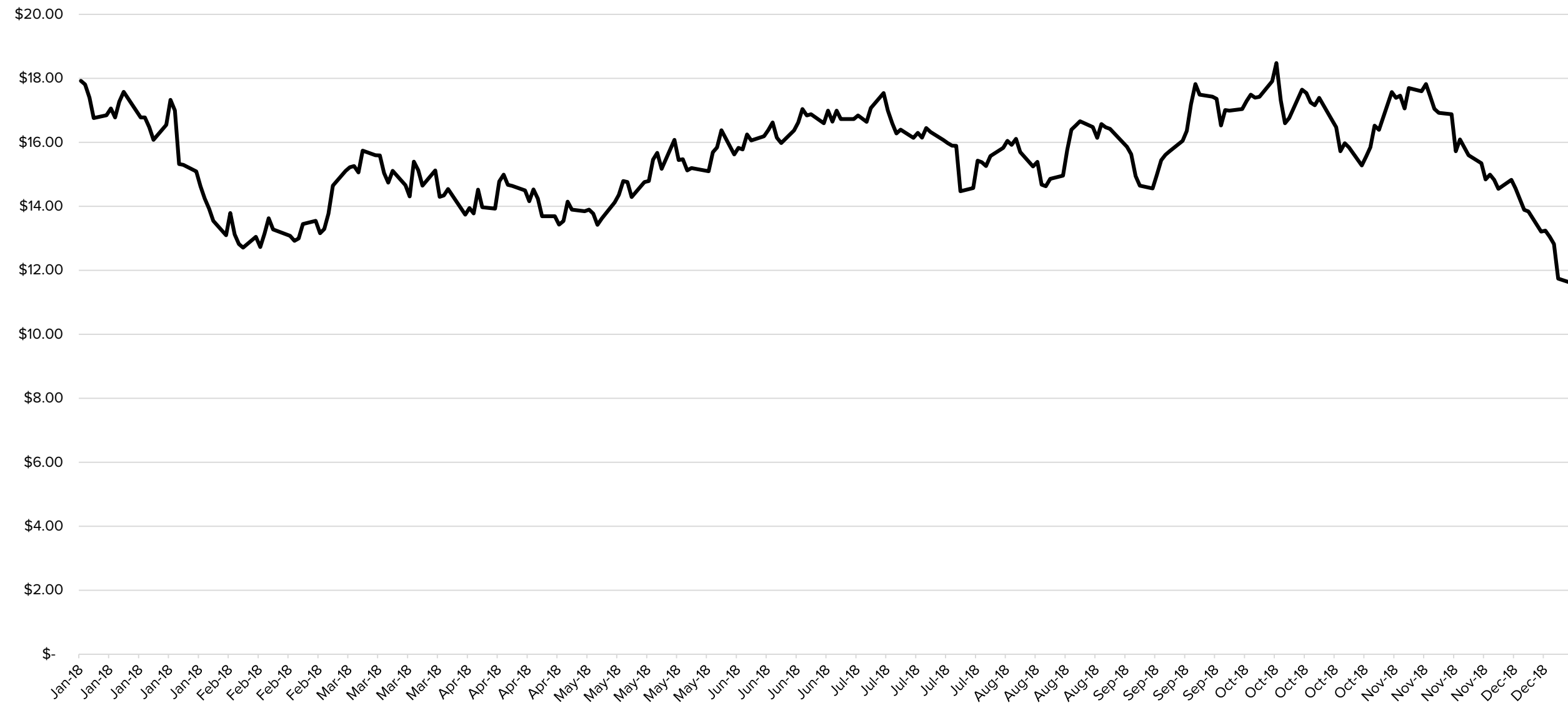


POSITIVE NEAR TERM PRICING; 2020+ = \$2.50

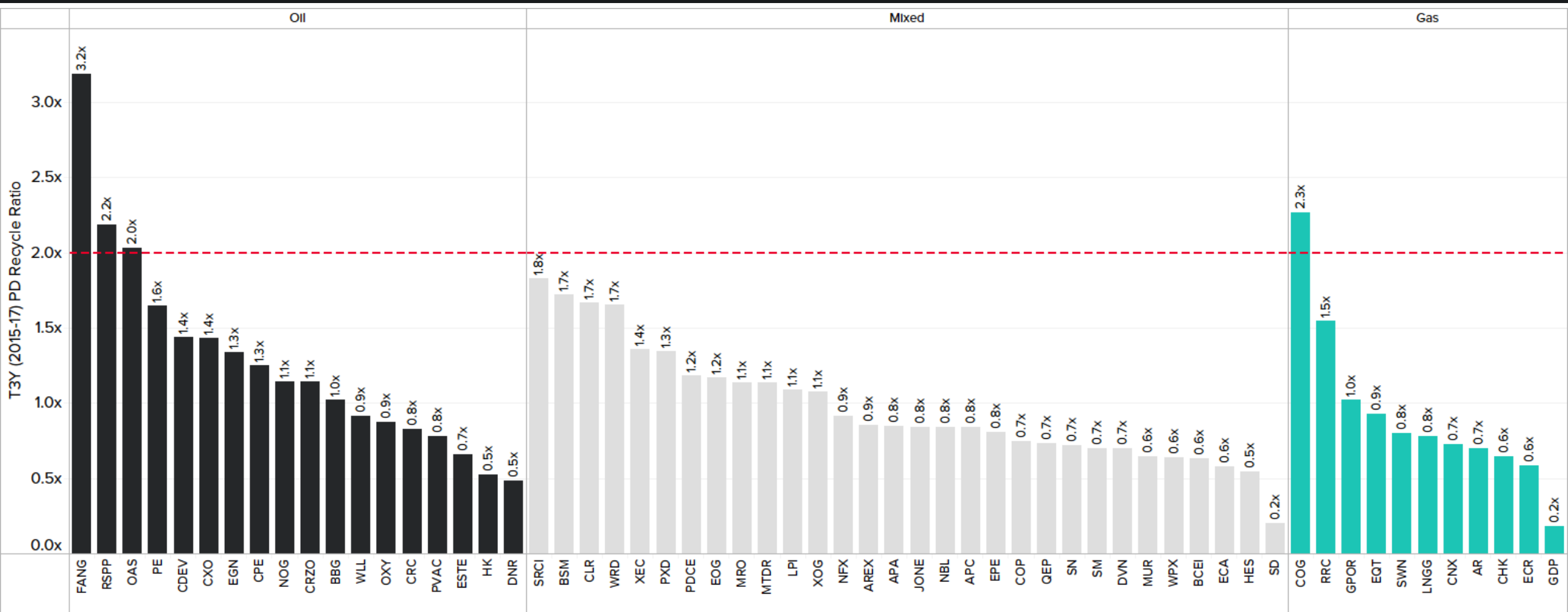
Despite massive inventory deficiency 2020 natural gas strip pricing hovering around \$2.50.

RRC: YTD PERFORMANCE

NO FOLLOW THROUGH OF COMMODITY STRENGTH TO EXPOSED EQUITIES.



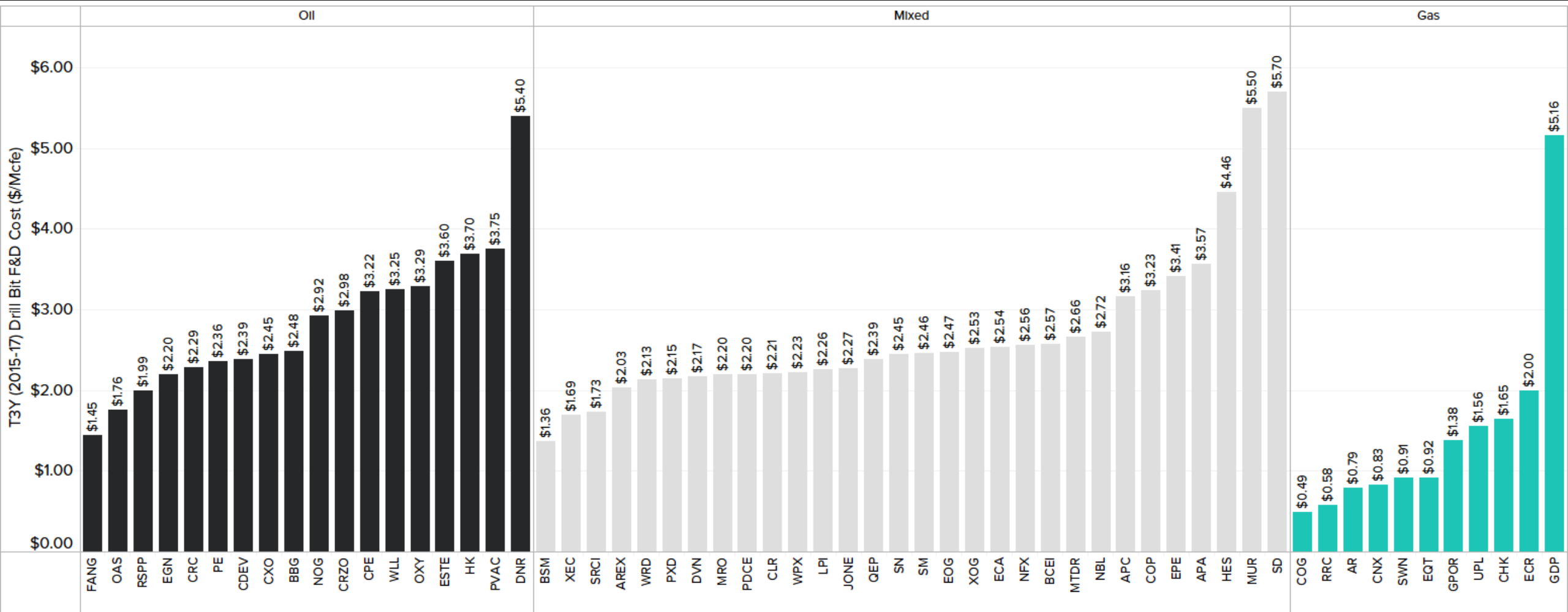
RRC: BEST IN CLASS RECYCLE RATIO



TOP QUINTILE OPERATOR

On a trailing 3-year basis, RRC is one of only 10 companies of the 60 we analyzed with an organic Recycle Ratio in excess of 1.5x. This metric is a proxy for ROIC and it looks only at changes in Proved Developed reserves as it more properly reflects the returns generated on capital employed.

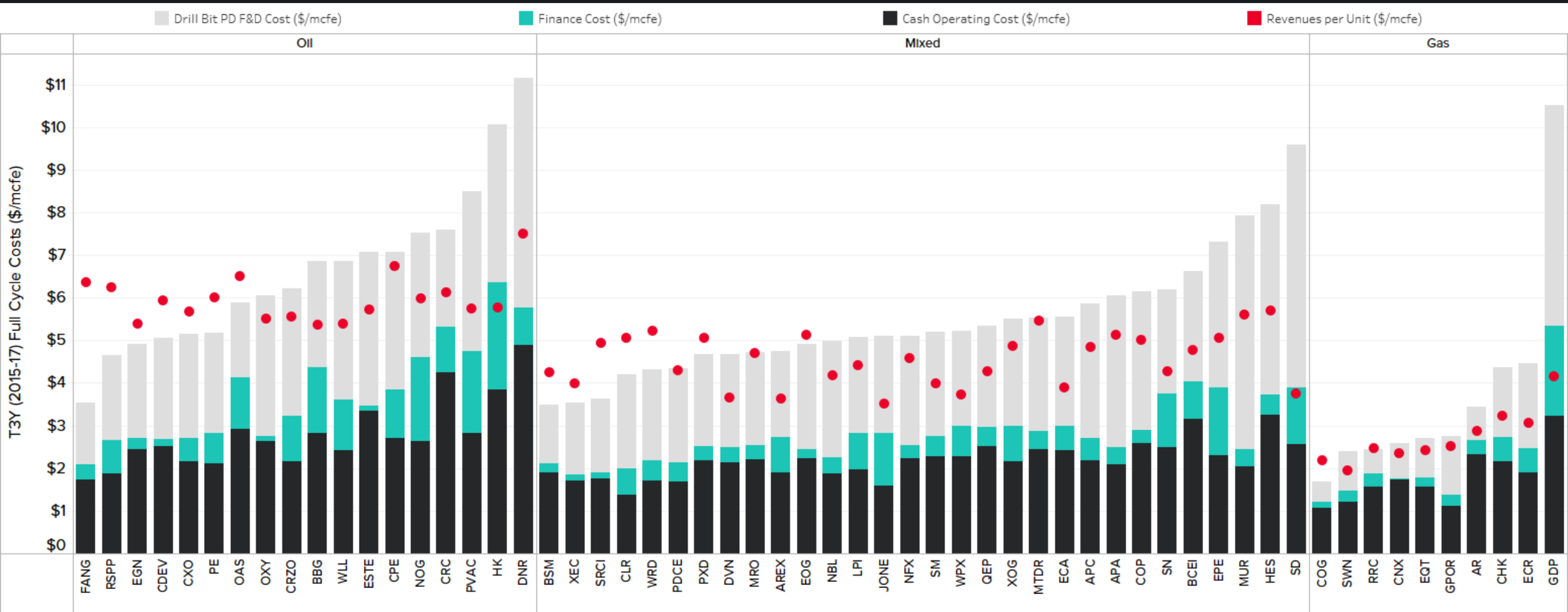
RRC: DRILL BIT F&D COST (\$/MCFE)



RRC IS EFFICIENT WITH THE DRILL BIT

Range resources is extremely efficient with the drill bit. Trailing 3-year F&D cost is best in class which is largely a function of rock quality. Other premium operators trade a significant premium to RRC.

RRC: FULL-CYCLE COSTS (\$/MCFE)

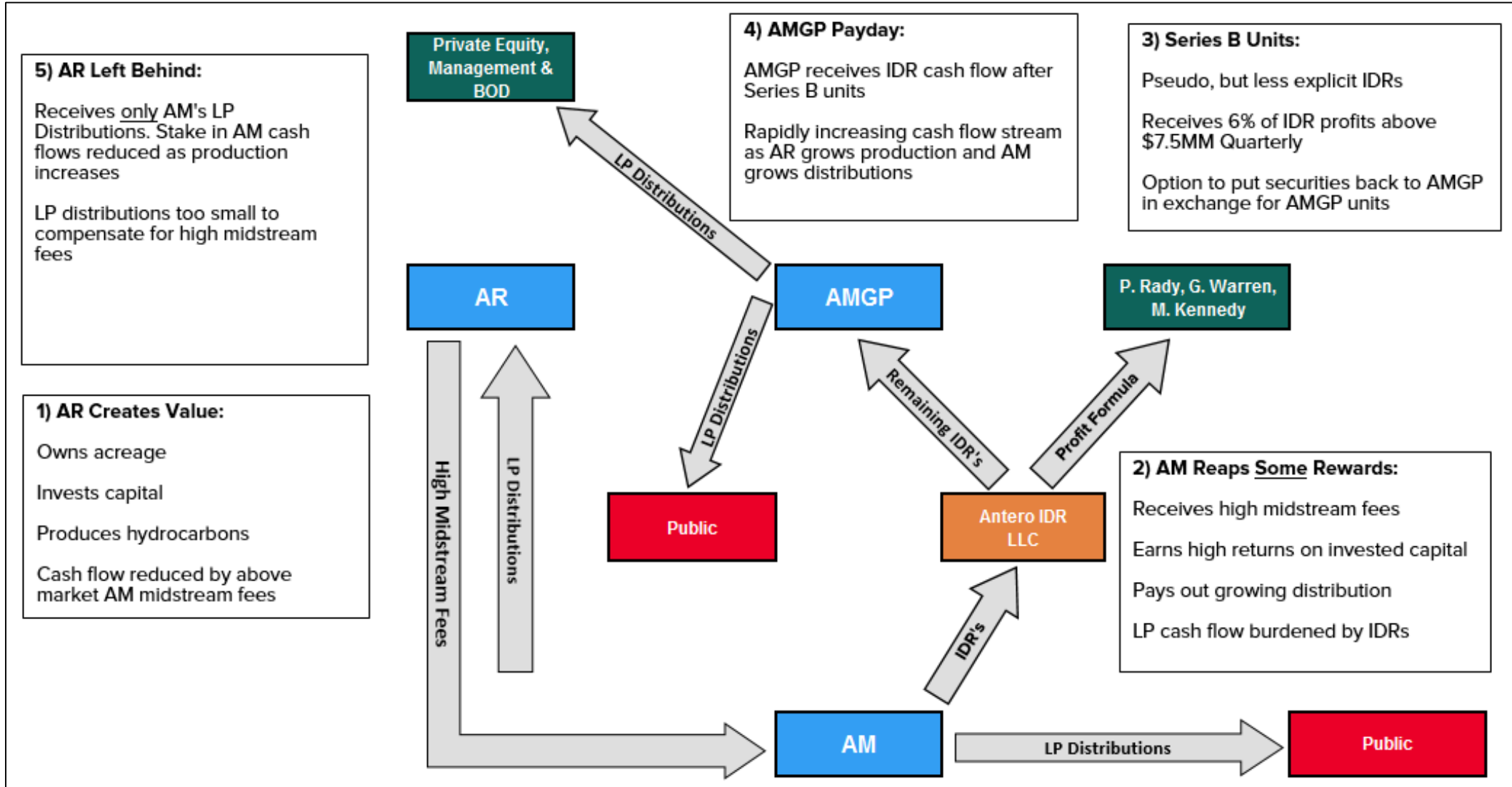


FEW SHALE E&PS MAKE MONEY ON A FULL-CYCLE BASIS

Full-cycle costs = cash opex + interest expense + F&D.

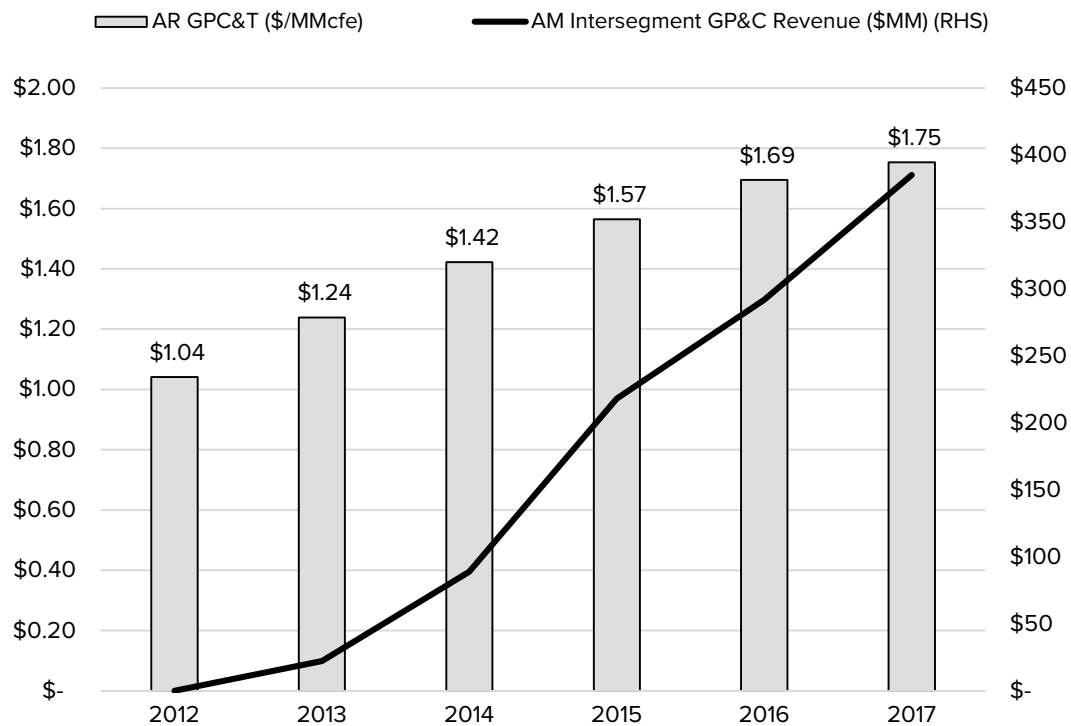
AR/AMGP: ANTERO'S MODEL SIMPLIFIED

AR IS A MEDIUM TO TRANSFER VALUE TO AMGP & INSIDERS.



AR/AMGP: AM WINS AT AR'S EXPENSE

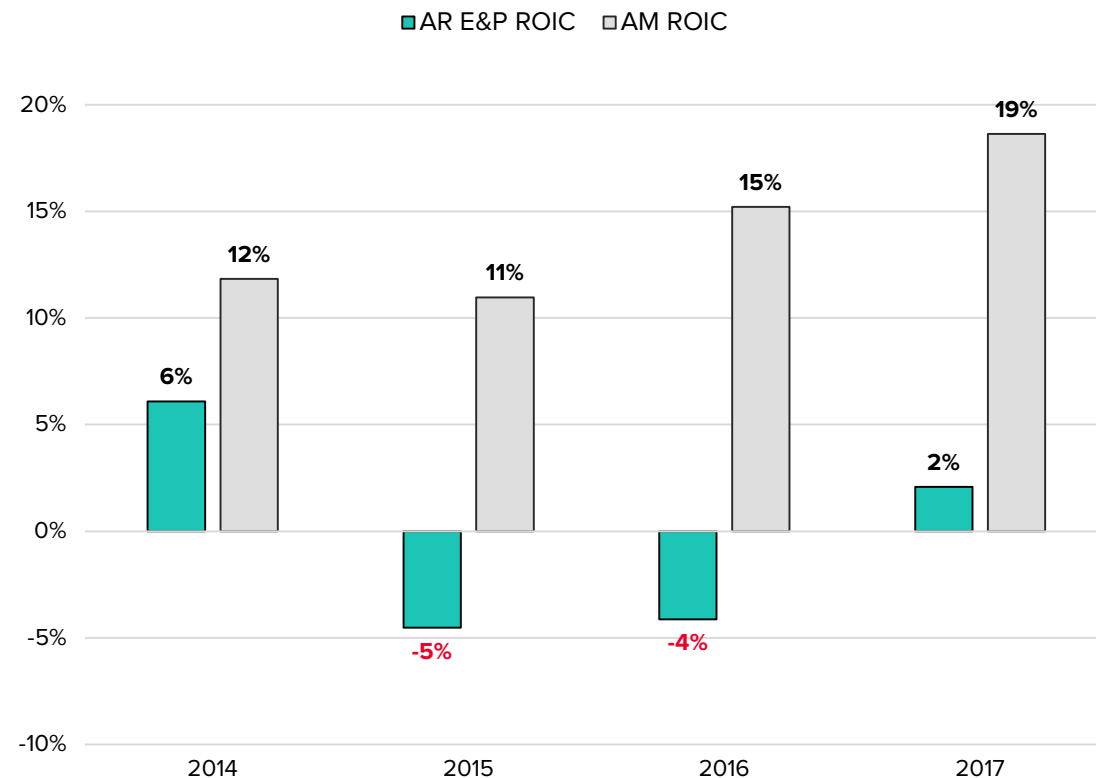
AR Midstream Expense



AR'S GPC&T EXPENSE PER UNIT JUMPED

AM's IPO in November of 2014 contributed to AR's Gathering, Processing, Compression & Transportation expense increasing ~65% from 2012 to 2017.

AR & AM Returns on Invested Capital



AND AM BENEFITTED

AM earns best in class ROIC at the E&P's expense.

TGE: ACCRETIVE GROWTH?

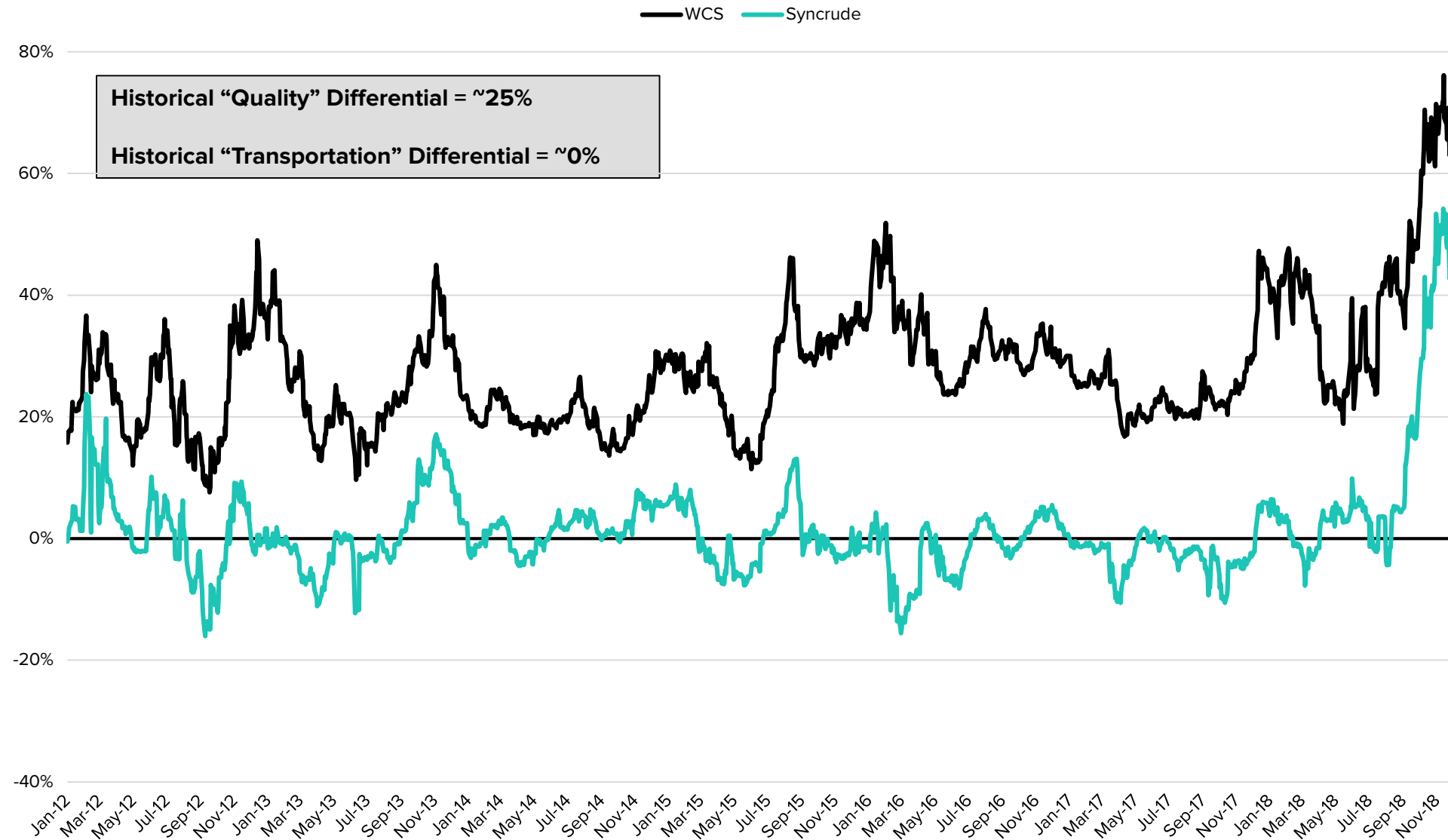
TGE Growth Projects: Accretion Math									
	TGE Interest	"Growth" CapEx (\$MM)	TGE Net "Growth" CapEx (\$MM)	Guided Build / Acquisition Multiple	TGE Net Implied EBITDA (\$MM)	Contracted Net EBITDA (\$MM)			
BNN / Buckhorn Water	100%	\$ 140	\$ 140	5.0x	\$ 28	\$ 6			
Cheyenne Hub	75%	\$ 133	\$ 100	5.9x	\$ 17	\$ 5			
Cheyenne Connector	33%	\$ 213	\$ 70	5.9x	\$ 12	\$ 8			
Pawnee Terminal	51%	\$ 60	\$ 31	5.9x	\$ 5	\$ 1			
Platteville Extension	100%	\$ 140	\$ 140	5.9x	\$ 24	\$ 11			
Iron Horse	75%	\$ 186	\$ 140	5.9x	\$ 24	\$ 3			
Total / Average	71%	\$ 872	\$ 620	5.7x	\$ 109	\$ 35			
M-CapEx (\$MM)					\$ (4)	\$ (4)			
Interest Expense (\$MM)					\$ (34)	\$ (34)			
DCF (\$MM)					\$ 71	\$ (3)			
DCF / Share					\$ 0.25	\$ (0.01)			
Accretion					12.8%	-0.5%			
					D&A (\$MM) - 40yr Life	\$ 16			
					M-CapEx % of D&A	25%			
					Cost of Debt	5.5%			
					Shares O/S	281			
					Annualized Distribution	\$ 1.99			

TGE'S GROWTH PROJECTS ARE NOT ACCRETIVE

TGE needs to recontract its core assets: Pony Express and Rockies Express. Or it needs to find accretive growth to fund its distribution. Growth project economics don't add up.

CNQ: DIFFERENTIAL BLOWOUT

WCS & SYNCRUDE DIFFERENTIAL AS A % OF WTI



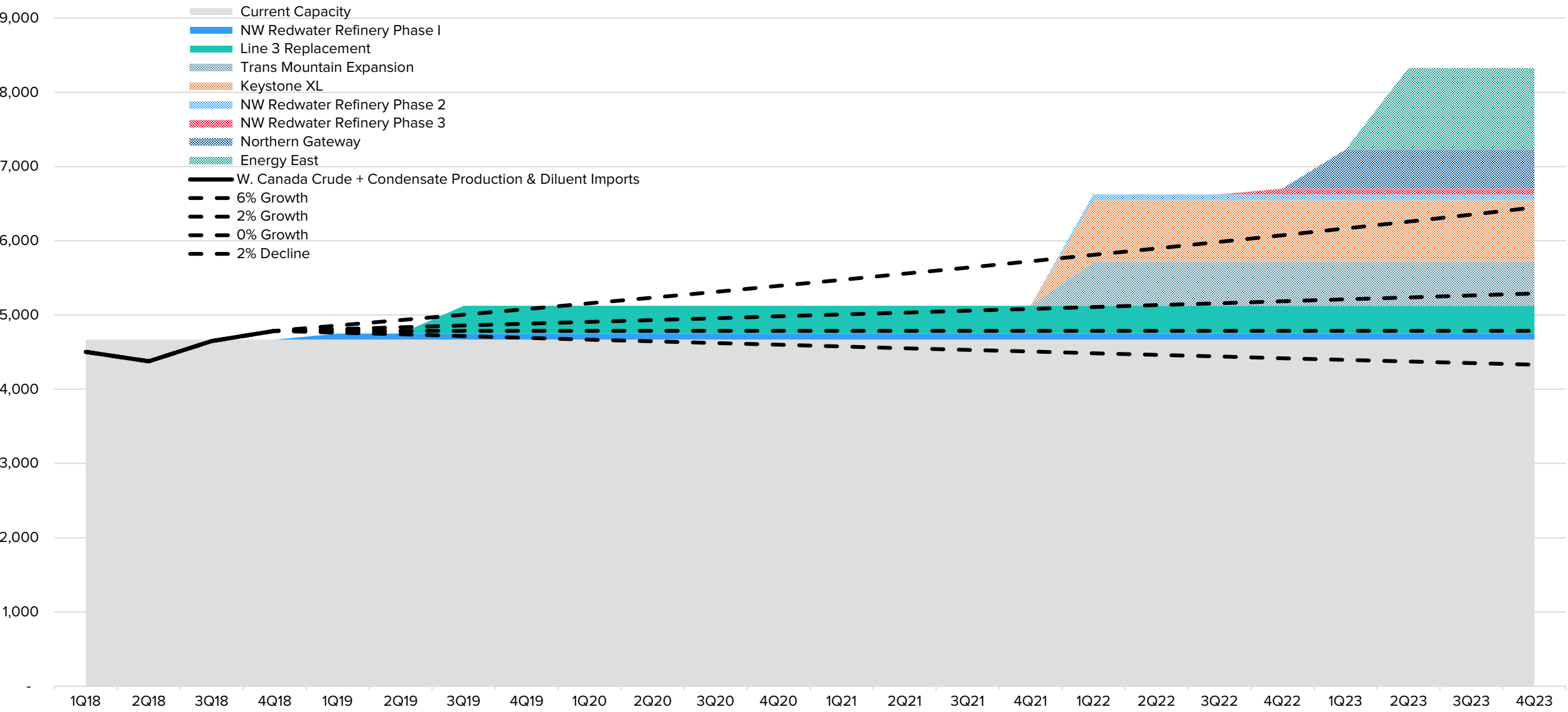
WCS is a lower quality grade than Syncrude. The WCS-SCO discount is a proxy for the “Quality” differential.

SCO’s quality is nearly equivalent to WTI; SCO-WTI trade near parity when transportation is unconstrained. The SCO-WTI discount is a proxy for the “Transportation” differential.

Current quality differentials are in line with historical averages while the “transportation” differential was at its highest point in ~7 years.

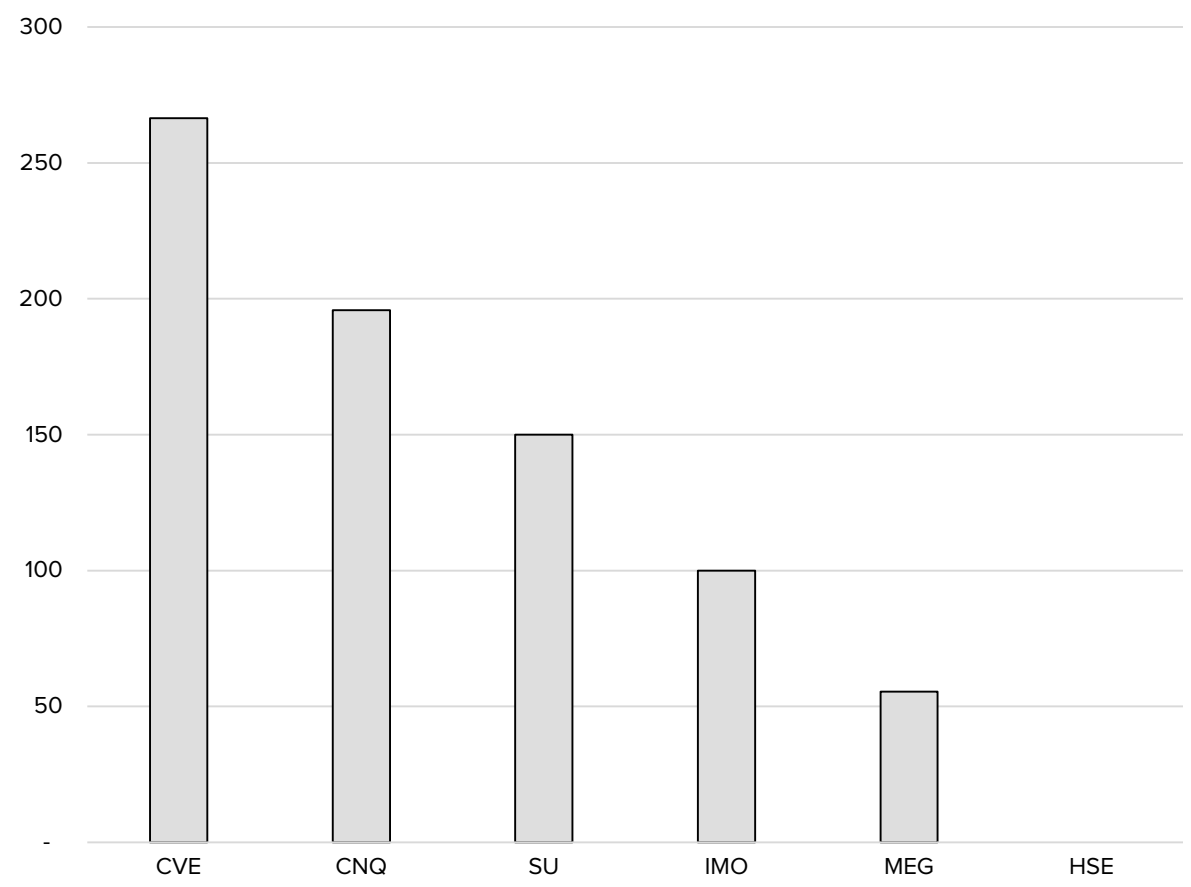
CNQ: W. CANADA PIPELINE SUPPLY / DEMAND PICTURE IS UGLY...

...BUT ISSUES SUBSIDE WITH EITHER TMX/KXL OR CONTAINED GROWTH

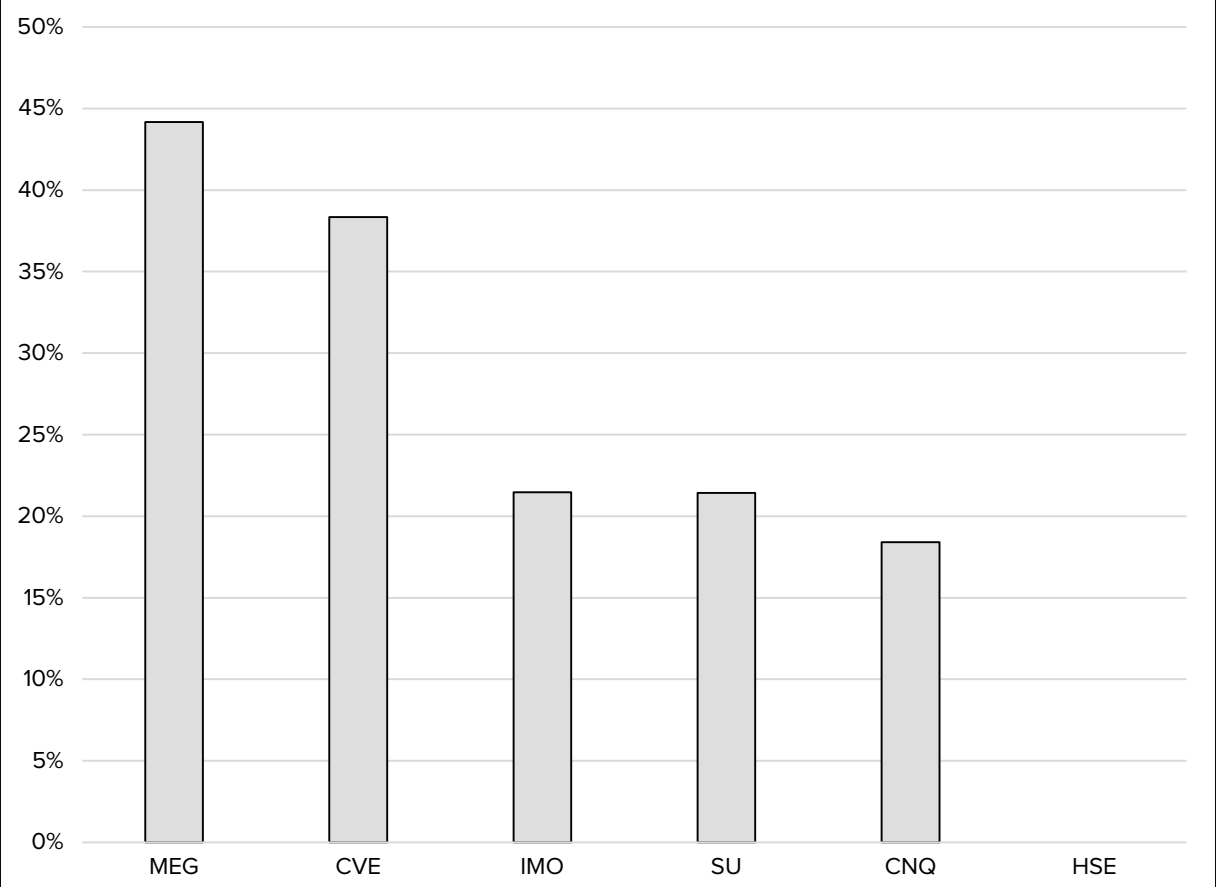


CNQ: EXPOSURE TO WCS

Est. WCS Exposure (Mb/d)



Est. WCS Exposure as a % of Total Production



CNQ HIGH NOMINAL EXPOSURE, LOW NET EXPOSURE

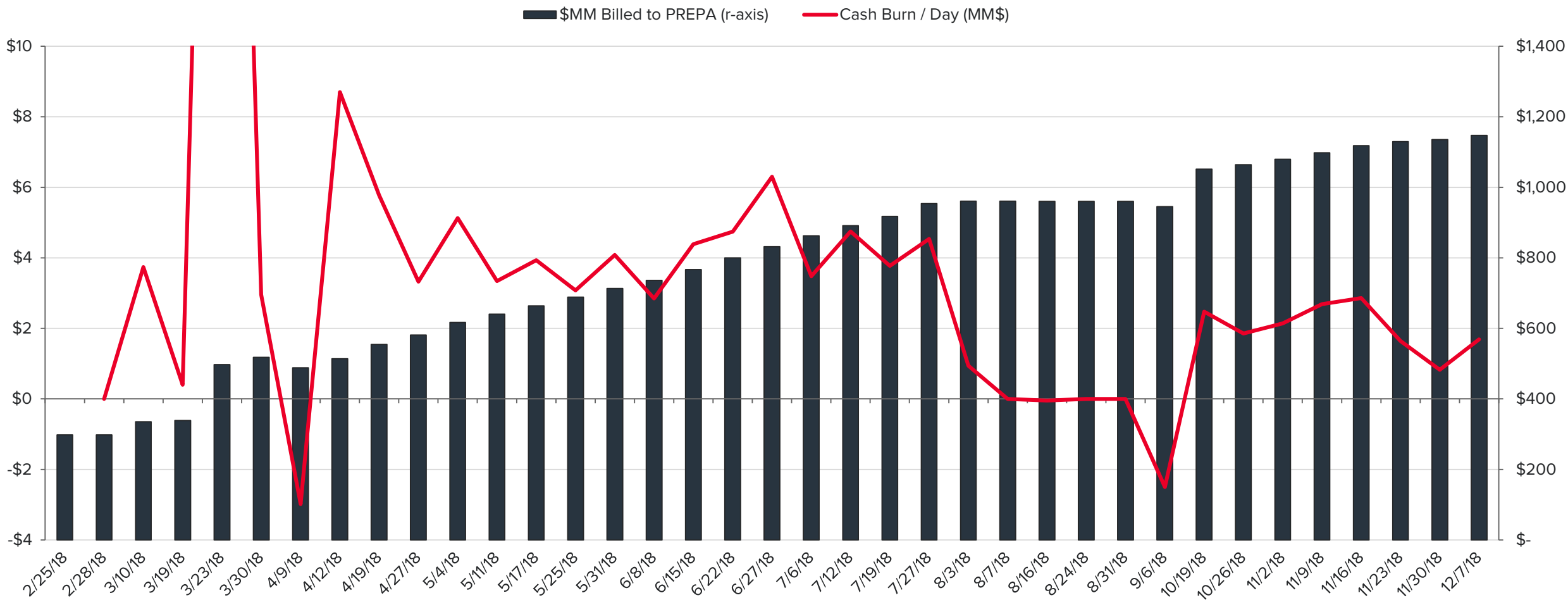
CNQ’s high nominal exposure is to be expected as the company is the largest oil & gas producer in Canada. Low net exposure is a reflection of a diversified asset base, committed pipeline capacity, and upgrading operations.

CNQ: CNQ VS. SPY

CNQ COMPLETING CAPEX CYCLE – FCF YIELD ~10% AT STRIP PRICING



TUSK: PREPA REVENUE



CASH BURN AVERAGING \$1-\$2MM PER WEEK

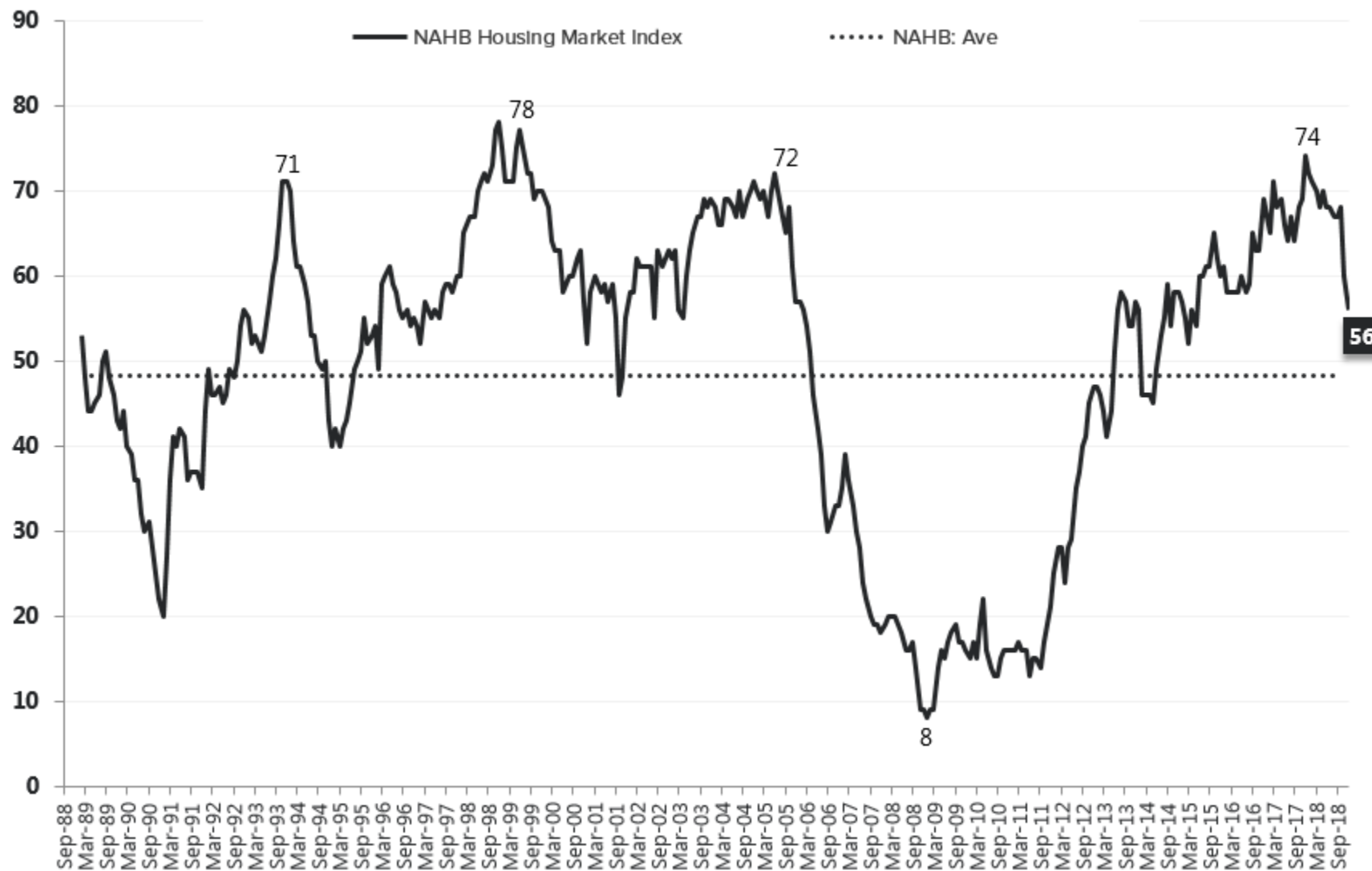
Contract recognition has slowed tremendously since the early recovery efforts in Puerto Rico

MACRO GRIND

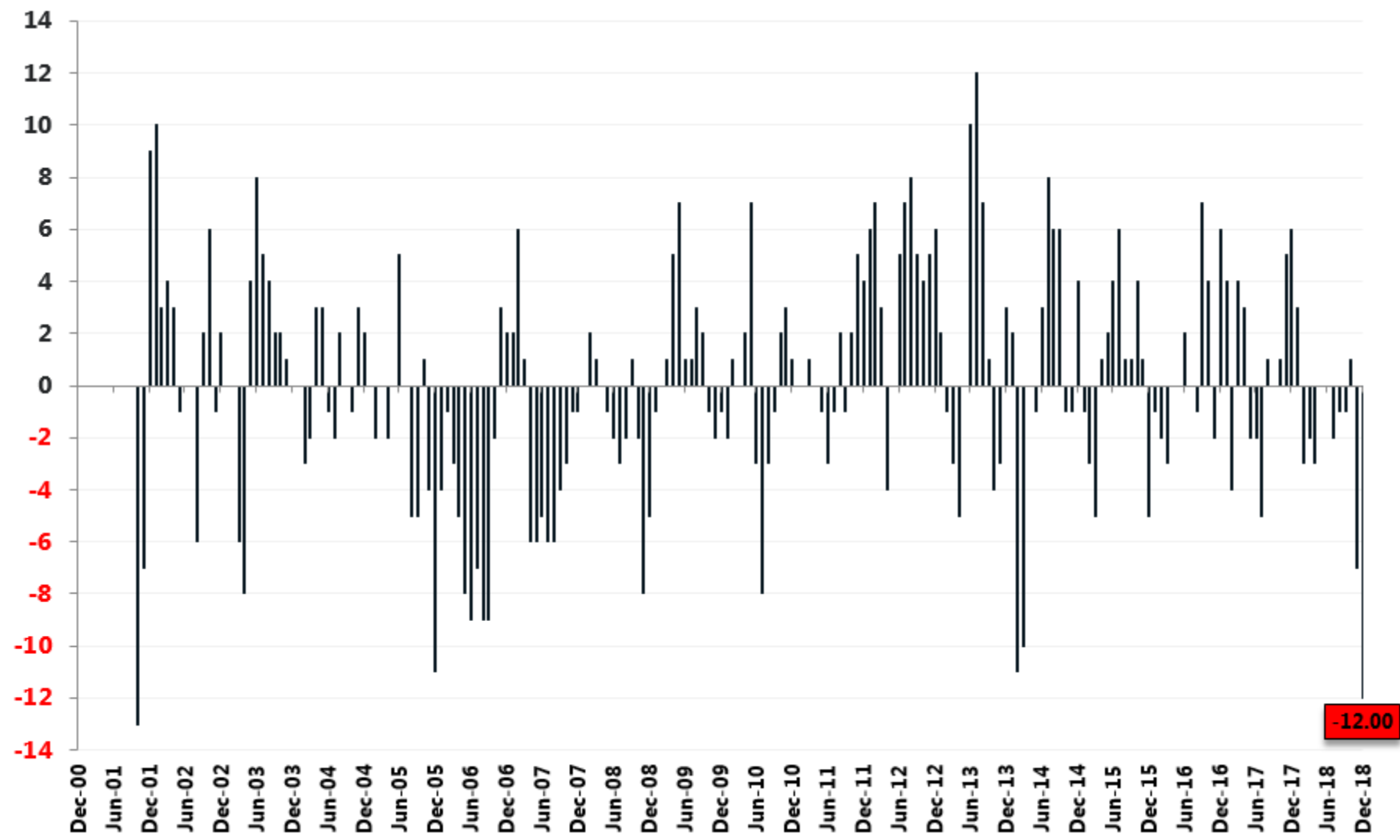
About That Transition To A Consumer Driven Economy...



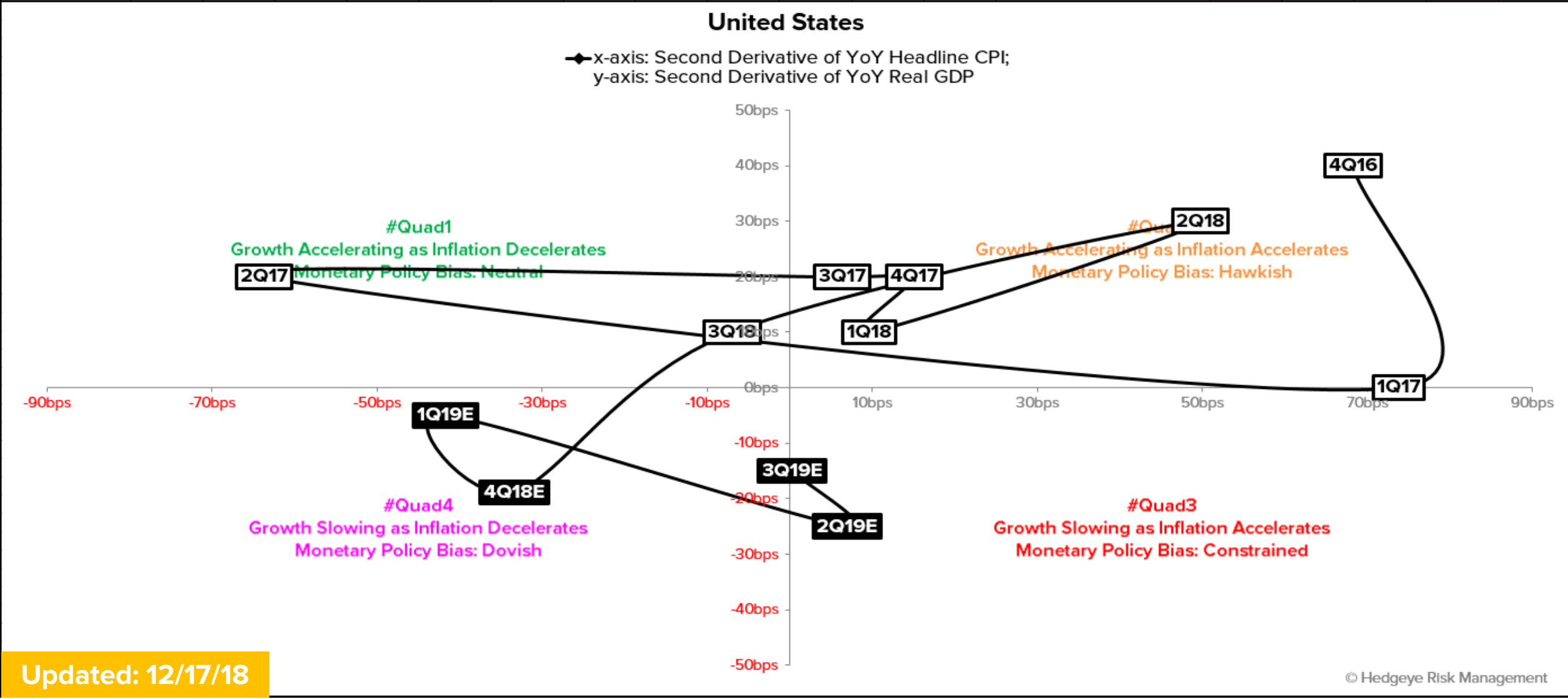
NAHB Housing Market Index



HMI: 2-Month Change



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%	3.50%	Hedgeye Estimates	1.38%	2.00%	3.11%	2.87%	-
Percentile (T10Y)	21%	41%	59%	46%	46%	44%	69%	64%	59%	56%	90%	82%	Bloomberg Consensus Estimates	2.60%	2.35%	2.50%	2.29%	-
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	2.81%	2.76%	2.51%	2.36%	2.61%
Percentile (T10Y)	51%	33%	23%	28%	54%	51%	64%	67%	72%	74%	90%	90%	Bloomberg Consensus Estimates	3.10%	3.10%	2.70%	2.41%	2.83%
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	2.31%	1.89%	1.96%	1.96%	2.03%
Percentile (T10Y)	15%	18%	18%	23%	59%	77%	67%	69%	74%	79%	87%	87%	Bloomberg Consensus Estimates	2.27%	2.07%	2.15%	2.25%	2.19%



Hedgeye Macro GIP Model Signals

12/14/2018

Hedgeye Macro GIP Model Signals

High-Frequency Economic Data Signals

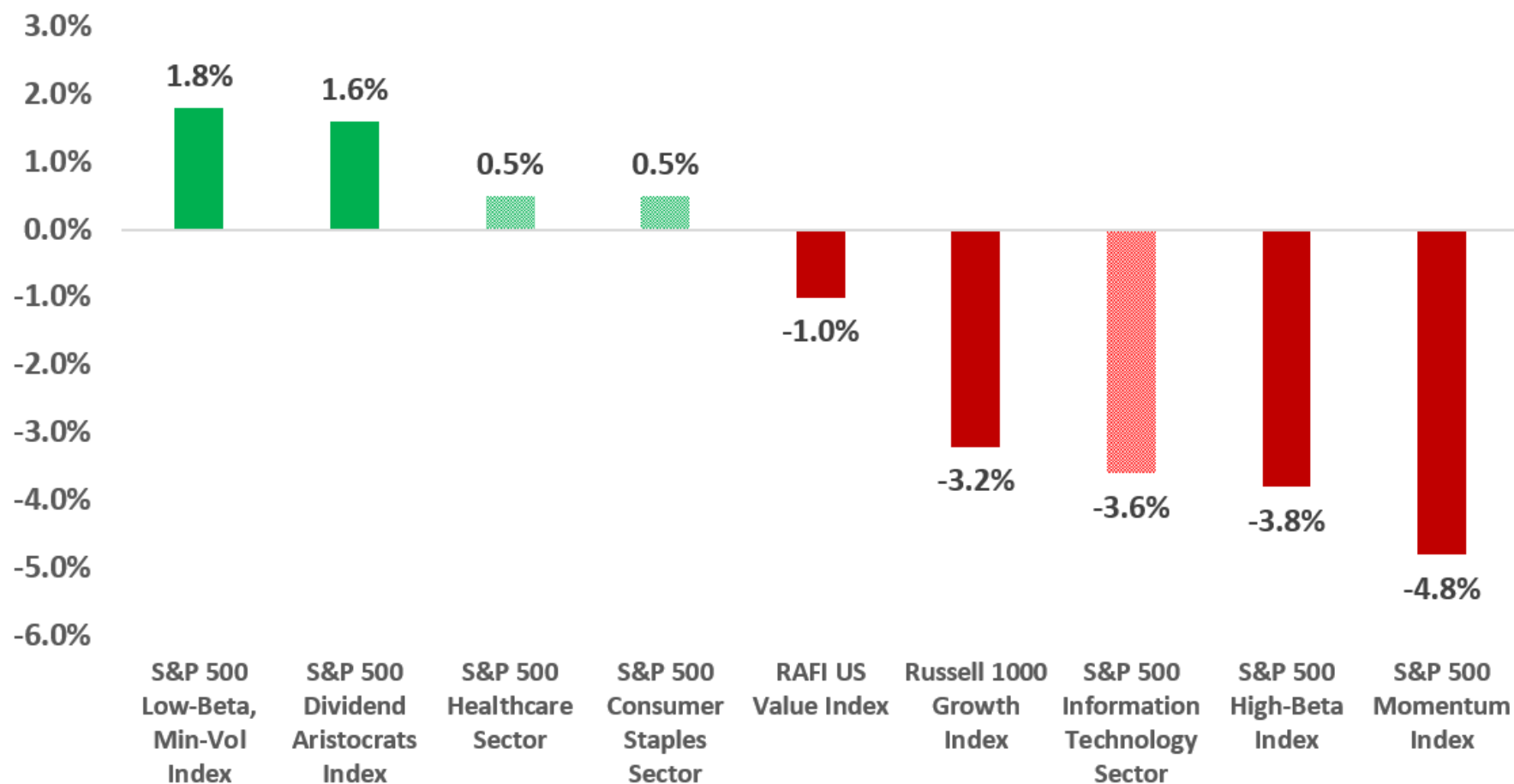
12/14/2018	Actuals									Hedgeye Forecasts				Consumption		Manufacturing		Exports		Composite PMI		Headline CPI		Core CPI	
	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18E	1Q19E	2Q19E	3Q19E	6MMA Trend	Percentile of Latest Reading (T10Y)	6MMA Trend	Percentile of Latest Reading (T10Y)	6MMA Trend	Percentile of Latest Reading (T10Y)	6MMA Trend	Percentile of Latest Reading (T10Y)	6MMA Trend	Percentile of Latest Reading (T10Y)	6MMA Trend	Percentile of Latest Reading (T10Y)
Argentina	-	-	-	-	-	-	3	3	3	2	4	1	-	⬇️	25%	-	-	⬇️	60%	-	-	⬆️	100%	-	-
Australia	3	2	3	4	1	3	2	2	4	4	4	-	3	⬆️	50%	⬇️	64%	⬆️	82%	⬇️	64%	➡️	30%	⬇️	7%
Brazil	1	1	1	1	1	2	4	3	2	2	3	3	4	⬆️	37%	⬆️	91%	⬆️	85%	⬆️	97%	⬆️	11%	⬆️	6%
Canada	1	2	2	1	3	3	3	3	2	4	1	3	1	➡️	42%	⬇️	63%	⬆️	76%	⬇️	63%	⬆️	85%	⬆️	94%
China	1	2	1	4	3	3	3	4	3	4	3	2	1	⬇️	1%	⬇️	13%	⬇️	46%	⬇️	0%	⬆️	55%	⬇️	66%
Eurozone	2	2	2	1	1	4	4	3	3	4	1	4	1	➡️	74%	⬇️	14%	⬆️	24%	⬇️	3%	⬆️	73%	⬇️	40%
France	3	2	2	1	1	2	3	3	3	4	1	4	4	⬆️	55%	⬇️	26%	⬇️	82%	➡️	46%	⬇️	80%	⬇️	24%
Germany	2	3	2	1	2	1	4	3	3	2	1	1	1	⬇️	37%	⬇️	6%	⬇️	76%	⬇️	0%	➡️	83%	⬇️	47%
India	4	4	4	4	2	2	2	2	4	1	3	2	2	-	-	⬆️	94%	⬇️	54%	⬆️	94%	⬇️	2%	-	-
Indonesia	4	3	2	2	1	1	4	1	4	3	1	4	2	⬇️	15%	⬇️	40%	⬇️	54%	⬇️	40%	➡️	13%	⬆️	11%
Italy	2	2	2	2	1	4	4	3	3	3	4	1	1	⬆️	82%	⬇️	0%	⬇️	20%	⬇️	0%	⬆️	69%	⬆️	33%
Japan	1	2	2	2	2	2	3	1	3	1	1	3	1	⬆️	89%	⬇️	31%	➡️	67%	⬆️	71%	⬆️	84%	⬆️	83%
Mexico	3	2	2	3	3	3	4	1	3	4	1	1	1	⬆️	80%	⬇️	3%	⬇️	76%	⬇️	3%	⬆️	73%	⬇️	63%
Russia	1	1	1	1	4	4	1	2	3	3	3	3	2	⬇️	41%	⬆️	89%	⬇️	84%	⬆️	69%	⬆️	16%	⬆️	13%
South Africa	1	2	1	1	1	4	4	3	2	2	2	2	4	⬆️	44%	-	-	⬆️	80%	⬇️	14%	⬆️	43%	➡️	25%
South Korea	4	3	2	4	2	4	-	3	3	2	4	1	4	➡️	68%	➡️	17%	⬇️	55%	➡️	17%	⬆️	57%	⬆️	10%
Spain	3	3	2	1	4	1	4	3	3	4	1	1	1	➡️	65%	⬇️	23%	⬆️	61%	⬇️	14%	⬇️	54%	⬆️	61%
Turkey	3	1	2	2	1	3	4	3	3	3	4	1	4	⬇️	0%	⬇️	6%	⬆️	79%	⬇️	6%	⬆️	98%	⬆️	98%
United Kingdom	-	2	2	2	3	3	4	1	2	4	1	4	4	⬆️	62%	⬇️	29%	⬆️	42%	⬇️	3%	➡️	43%	⬇️	41%
United States	2	2	2	1	2	2	2	2	1	4	4	3	3	⬇️	71%	⬆️	93%	⬇️	64%	⬆️	99%	⬇️	71%	⬇️	77%
MODE/MEAN	1	2	2	1	1	3	4	3	3	4	1	1	1	⬆️	49%	⬇️	39%	⬇️	63%	⬇️	37%	⬆️	57%	⬆️	44%

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

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

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

Expected Value In #Quad4



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

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

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

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

U.S. Index Revenue & Earnings Comps

Q3 2018 QTD			
S&P 500	SALES GROWTH (YY%)	EARNINGS GROWTH (YY%)	#REPORTED
S&P 500 (Aggte.)	8.1%	26.1%	491 / 500
Energy	19.6%	123.9%	30 / 30
Materials	10.7%	29.6%	23 / 23
Industrials	6.8%	17.1%	69 / 69
Consumer Discretionary	8.1%	22.6%	61 / 64
Consumer Staples	2.9%	9.3%	31 / 33
Healthcare	7.1%	14.6%	61 / 62
Financials	4.5%	37.9%	67 / 67
Information Technology	10.8%	25.5%	65 / 68
Communication Services	12.1%	27.5%	22 / 22
Utilities	1.2%	13.0%	29 / 29
Real Estate	13.1%	8.9%	32 / 32

Nasdaq 100	SALES GROWTH (YY%)	EARNINGS GROWTH (YY%)	#REPORTED
Nasdaq (Aggte.)	12.1%	23.2%	97 / 100
Industrials	10.2%	29.3%	7 / 7
Consumer Discretionary	22.7%	72.3%	16 / 17
Consumer Staples	5.4%	5.4%	6 / 6
Healthcare	3.9%	4.7%	19 / 19
Information Technology	14.9%	28.2%	33 / 35
Communication Services	10.5%	21.5%	12 / 12

U.S. Index Revenue & Earnings Comps

Dow Jones	SALES GROWTH (YY%)	EARNINGS GROWTH (YY%)	#REPORTED
Dow Jones (Aggte.)	8.8%	27.3%	30 / 30
Energy	17.8%	98.8%	2 / 2
Industrials	10.1%	32.4%	1 / 1
Consumer Discretionary	6.7%	22.4%	4 / 4
Consumer Staples	4.4%	23.0%	3 / 3
Health Care	2.4%	6.0%	4 / 4
Financials	8.1%	12.7%	4 / 4
Information Technology	8.1%	29.9%	4 / 4
Communication Services	14.7%	28.6%	6 / 6

Russell 2000	SALES GROWTH (YY%)	EARNINGS GROWTH (YY%)	#REPORTED
Russell 2000 (Aggregate)	8.8%	34.3%	1920 / 2005
Energy	24.4%	5821.5%	122 / 124
Materials	10.9%	27.4%	71 / 72
Industrials	10.4%	31.3%	251 / 267
Consumer Discretionary	5.6%	18.3%	196 / 226
Consumer Staples	-5.8%	1.5%	46 / 55
Healthcare	7.8%	3.8%	377 / 384
Financials	14.6%	44.1%	401 / 404
Information Technology	6.7%	24.3%	219 / 230
Communication Services	7.9%	N.M.	66 / 67
Utilities	6.9%	-4.6%	36 / 36
Real Estate	6.5%	5.1%	110 / 113

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	\$99.73	-2.54%	-7.65%	-14.92%	1.05%
Financial Select Sector	XLF	\$24.00	-0.99%	-11.01%	-12.98%	-14.01%
Health Care Select Sector	XLV	\$87.19	-1.99%	-9.05%	-8.37%	5.45%
Technology Select Sector	XLK	\$63.20	-2.12%	-6.98%	-16.10%	-1.17%
Consumer Staples Select Sector	XLP	\$53.24	-2.31%	-5.37%	-1.28%	-6.42%
Industrial Select Sector	XLI	\$65.95	-1.64%	-9.08%	-15.88%	-12.85%
Materials Select Sector	XLB	\$50.44	-1.71%	-7.64%	-12.93%	-16.67%
The Energy Select Sector	XLE	\$60.96	-1.82%	-7.79%	-19.51%	-15.64%
Utilities Select Sector	XLU	\$54.99	-3.22%	-1.08%	4.44%	4.38%
Real Estate Select Sector	XLRE	\$32.17	-3.74%	-4.96%	-1.35%	-2.34%
Communications Services Sector	XLC	\$42.76	-1.95%	-5.00%	-12.73%	
S&P 500	SPX	2,545.94	-2.08%	-7.76%	-12.63%	-4.78%

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	\$99.73	-0.46%	0.11%	-2.29%	5.83%
Financial Select Sector	XLF	\$24.00	1.09%	-3.25%	-0.35%	-9.23%
Health Care Select Sector	XLV	\$87.19	0.09%	-1.29%	4.26%	10.23%
Technology Select Sector	XLK	\$63.20	-0.04%	0.78%	-3.47%	3.60%
Consumer Staples Select Sector	XLP	\$53.24	-0.23%	2.39%	11.35%	-1.64%
Industrial Select Sector	XLI	\$65.95	0.44%	-1.32%	-3.25%	-8.07%
Materials Select Sector	XLB	\$50.44	0.36%	0.13%	-0.30%	-11.89%
The Energy Select Sector	XLE	\$60.96	0.26%	-0.03%	-6.88%	-10.86%
Utilities Select Sector	XLU	\$54.99	-1.14%	6.68%	17.07%	9.16%
Real Estate Select Sector	XLRE	\$32.17	-1.66%	2.80%	11.28%	2.44%
Communications Services Sector	XLC	\$42.76	0.13%	2.76%	-0.10%	

Market Share Volume & Total Value Traded

<u>INDEX/SECURITY</u>	VOLUME: (12/17) vs.			
	<u>Prior Day</u>	<u>1M Ave</u>	<u>3M ave</u>	<u>1Y Ave</u>
Total Market Volume*	3%	4%	2%	-6%
Total Exchange Volume**	20%	21%	19%	34%

*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	-2.6%	-3.9%	-7.3%	-11.6%	-8.4%	-12.1%
	Low Debt/EV	-2.3%	-4.0%	-7.6%	-13.7%	-11.8%	-1.2%
SI	High Short Interest	-2.4%	-4.3%	-8.5%	-12.3%	-11.0%	-4.9%
	Low Short Interest	-2.0%	-3.7%	-7.5%	-11.5%	-7.7%	-4.1%
BETA	High Beta	-2.0%	-4.5%	-10.6%	-18.5%	-17.9%	-10.6%
	Low Beta	-2.7%	-3.2%	-4.3%	-4.6%	-0.1%	-1.1%
YIELD	High Yield	-2.5%	-4.0%	-7.7%	-12.4%	-11.4%	-14.2%
	Low Yield	-2.3%	-4.0%	-7.8%	-14.4%	-11.2%	2.4%
MKT CAP	MCAP Bottom 25%	-2.2%	-4.7%	-10.3%	-16.9%	-17.6%	-16.1%
	MCAP Top 25%	-2.0%	-3.1%	-6.2%	-9.2%	-5.2%	-0.8%
Sales	Top 25% Sales Growth	-2.1%	-3.7%	-7.2%	-13.6%	-11.1%	-2.2%
	Bottom 25% Sales Growth	-2.3%	-3.8%	-8.0%	-12.0%	-11.2%	-12.8%
EPS	Top 25% EPS Growth	-2.0%	-3.9%	-8.7%	-15.0%	-12.0%	-4.5%
	Bottom 25% EPS Growth	-2.2%	-3.7%	-7.0%	-12.0%	-11.2%	-11.7%

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

Rates & Spreads

		1D	5D	1M	3M	vs. 52-Wk, Bps		vs.	vs.
	Price	Bps Chg	Bps Chg	Bps Chg	Bps Chg	High	Low	3Y Ave	5Y Ave
3M T-Bill	2.38%	-2.8	0.8	4	23	-4	108	134	175
3M LIBOR	2.80%	0.0	2.5	16	46	0	118	139	185
2Y T-Note	2.69%	-4.1	-3.8	-11	-9	-28	87	113	154
5Y T-Note	2.69%	-3.7	-2.1	-18	-19	-40	54	71	87
10Y T-Note	2.86%	-3.2	0.0	-21	-13	-40	50	51	51
30Y T-Note	3.11%	-3.1	-1.7	-20	-2	-35	42	25	15
2Y-10Y Spread, Bps	17	0.9	3.7	-9.8	-4	-12	-37	-62	-103
IG SPREAD (AAABBB)	1.75%	0.0	-4.0	12	26	-4	55	17	15
HIGH YIELD									
5Y BREAKEVEN	1.59%	-1.6	-4.9	-28.7	-39.7	-59.2	0.5	-14.9	-9.9

Key \$USD Correlations

METRIC	15D	30D	90D	120D	180D	52-Wk Rolling 30D Correlation			
						High	Low	% Time Pos	% Time Neg
SPX	-0.25	-0.34	-0.82	-0.67	0.17	0.73	-0.93	36%	64%
BRENT Oil	-0.22	-0.48	-0.79	-0.79	-0.47	0.84	-0.91	27%	73%
CRB Index	-0.31	-0.48	0.37	-0.79	-0.69	0.67	-0.94	45%	55%
GOLD	-0.12	-0.04	0.54	0.09	-0.77	0.54	-0.94	9%	91%

*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)	84,160	(98,081)	185,326	173,834	161,292	249,638	(248,441)	-1.69X	0.05X
	VIX	11,017	(16,596)	(43,551)	(64,343)	(32,364)	92,913	(174,665)	0.59X	1.25X
	Russell 2000 (mini)	(32,820)	(10,891)	(33,566)	(2,701)	1,558	93,772	(98,082)	-0.73X	-0.63X
	Dow Jones (mini)	23,969	4,246	31,512	26,825	30,105	95,976	(999)	-0.31X	-0.79X
	Nasdaq (mini)	(9,577)	(22,473)	13,226	21,991	12,948	163,838	(24,647)	-1.32X	-1.35X
	Nikkei Index	(8,411)	(4,310)	(7,303)	(6,362)	347	14,253	(9,128)	-1.15X	-2.27X
RATES	10Y UST	(248,170)	(19,434)	(525,916)	(496,004)	(365,254)	372,991	(758,490)	0.61X	-0.55X
	2Y UST	(363,293)	(68,219)	(303,176)	(186,419)	(153,226)	104,027	(365,472)	-1.75X	-2.35X
	5Y UST	(349,091)	(21,498)	(669,268)	(684,533)	(579,749)	(33,993)	(866,140)	1.41X	-0.07X
	UST Bonds	(67,792)	15,574	(90,350)	(57,159)	(3,896)	122,839	(142,810)	-0.95X	-1.63X
	30D Fed Funds	(94,747)	(11,824)	(57,012)	21,244	28,833	219,071	(286,025)	-1.28X	-0.39X
	Eurodollar	(1,823,266)	49,768	(2,122,144)	(2,340,284)	(2,500,372)	251,098	(3,110,209)	1.92X	-0.20X
CURRENCIES	USD	38,528	(881)	38,284	32,376	15,345	56,635	(10,666)	1.32X	0.90X
	JPY	(112,667)	(5,331)	(97,061)	(76,797)	(67,674)	70,342	(140,151)	-1.00X	-1.23X
	EUR	(62,455)	(2,559)	(27,498)	(6,672)	58,799	147,318	(155,847)	-1.75X	-0.73X
	GBP	(32,059)	(1,338)	(47,972)	(48,110)	(11,574)	49,216	(113,271)	-0.54X	0.13X
	AUD	(49,232)	4,569	(64,532)	(55,715)	(26,617)	77,969	(74,181)	-0.72X	-1.55X
	CAD	(14,531)	(4,511)	(12,902)	(23,370)	(8,890)	78,001	(99,736)	-0.22X	-0.26X
	MXN	4,975	(10,800)	35,810	26,932	46,762	117,131	(89,524)	-1.19X	-0.08X
	NZD	(21,199)	(874)	(27,817)	(25,856)	(10,610)	35,981	(35,412)	-0.59X	-1.21X
COMMODITIES	CHF	(19,497)	1,250	(18,211)	(29,904)	(25,059)	10,064	(47,216)	0.43X	-0.47X
	CRUDE OIL	382,836	(15,940)	488,727	561,238	641,402	784,290	195,086	-2.40X	-0.70X
	GOLD	(1,539)	50,289	(54,941)	(45,477)	44,638	286,921	(103,009)	-0.46X	-1.14X
	COPPER	10,336	2	5,999	9,140	26,101	67,602	(44,710)	-0.76X	-0.18X
	Natural Gas	15,022	(15,112)	(12,583)	(49,351)	(75,875)	57,455	(207,953)	1.77X	1.55X
	RBOB Gasoline	73,126	(3,283)	93,931	98,332	92,225	114,862	29,519	-1.61X	-0.03X
	ULSD Heating Oil	(3,442)	(2,737)	30,029	36,070	36,591	67,696	(12,732)	-2.38X	-1.67X
	Silver	(1,944)	11,069	(15,148)	(4,481)	2,261	107,003	(30,158)	-0.22X	-1.25X
	Platinum	15,009	(8,704)	12,846	2,804	13,532	56,853	(11,540)	0.09X	-0.59X
	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	107,300	79,309	37,813	33,301	88,878	373,443	(166,835)	0.12X	0.48X
	Soybeans	5,971	53,897	(47,096)	(43,365)	26,578	255,950	(113,144)	-0.20X	-0.52X
	Wheat	(17,673)	15,613	(12,159)	8,157	(16,843)	63,219	(143,292)	-0.02X	0.79X
	Live Cattle	97,889	5,063	91,593	76,465	75,995	164,117	7,649	0.66X	0.34X
	Lean Hogs	44,885	1,521	30,945	15,675	20,244	90,653	(11,151)	1.01X	0.12X
	Sugar	14,209	2,699	687	(26,410)	(49,161)	351,383	(131,628)	1.06X	-0.46X
	Cotton	47,294	4,057	57,224	76,229	91,634	132,318	(28,816)	-1.86X	-0.81X
	Coffee	(36,536)	(10,098)	(57,051)	(68,469)	(55,403)	67,942	(106,651)	0.80X	-0.60X
	Cocoa	(971)	4,705	(10,178)	5,282	18,673	68,750	(43,846)	-0.73X	-0.39X
	Orange Juice	(6,286)	1,256	(4,327)	(376)	(453)	10,123	(7,592)	-1.48X	-1.90X

HEDGEYE TV

The Macro Show
December 18, 2018

Euro-Area Economic Data

Date Time	Country/Region	C	Event	Period	Surv(M)	Actual	Prior	Revised	S	Ticker
12/18/18 03:00	Spain	SP	Labour Costs YoY	3Q	--	1.90%	0.70%	--	93.1034	SPLCTYY Index
12/18/18 04:00	Germany	GE	IFO Business Climate	Dec	101.7	101	102	--	98.3607	GRIFPBUS Index
12/18/18 04:00	Germany	GE	IFO Expectations	Dec	98.4	97.3	98.7	--	83.6066	GRIFPEX Index
12/18/18 04:00	Germany	GE	IFO Current Assessment	Dec	105	104.7	105.4	105.5	80.3279	GRIFPCA Index

Volatility

TIME WINDOW SETTING:		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	TICKER		IVOL / RVOL	Yesterday	1W Ago	1M Ago	TTM Z-Score	3Yr Z-Score	CURRENT	MM %	10YR	CURRENT	MM %	10YR
US EQUITIES			CURRENT											
Utilities Sector SPDR ETF	XLU US EQUITY	7.07%	20%	20%	2%	-9%	1.2	0.7	11.9	-29%	34%	14.2	-7%	54%
Health Care Sector SPDR ETF	XLV US EQUITY	6.63%	-9%	-9%	-3%	-23%	-0.5	-0.8	22.4	-3%	90%	20.4	15%	87%
Consumer Discretionary Sector SPDR ETF	XLX US EQUITY	1.92%	-9%	-9%	-15%	-21%	-0.7	-0.9	25.7	-5%	86%	23.4	10%	81%
Power Shares QQQ Trust ETF	QQQ US EQUITY	1.64%	-14%	-14%	-19%	-29%	-0.6	-0.8	30.0	-13%	92%	25.8	6%	88%
Technology Sector SPDR ETF	XLK US EQUITY	-0.17%	-14%	-14%	-18%	-29%	-0.5	-0.8	32.7	-8%	94%	28.2	12%	92%
SPDR S&P 500 ETF Trust	SPY US EQUITY	-3.06%	-12%	-12%	-8%	-23%	-0.4	-0.8	21.1	-7%	83%	18.6	6%	75%
Vanguard Real Estate REIT ETF	VNQ US EQUITY	-3.40%	11%	11%	-16%	-23%	1.4	0.5	14.5	-24%	44%	16.2	10%	52%
Consumer Staples Sector SPDR ETF	XLP US EQUITY	-4.50%	16%	16%	3%	-16%	0.4	0.2	12.8	-25%	68%	14.9	4%	80%
I-Shares Russell 2000 ETF	IWM US EQUITY	-9.04%	0%	0%	-7%	-15%	-0.3	-0.4	23.5	-7%	79%	23.5	9%	73%
Industrials Sector SPDR ETF	XLI US EQUITY	-11.72%	1%	1%	-7%	-12%	-0.1	-0.4	22.6	-6%	80%	22.8	8%	79%
Financials Sector SPDR ETF	XLF US EQUITY	-12.94%	9%	9%	3%	-12%	0.1	0.0	22.8	-5%	71%	24.8	17%	75%
Energy Sector SPDR ETF	XLE US EQUITY	-13.87%	1%	1%	2%	1%	0.1	-0.2	26.5	-1%	77%	26.8	0%	76%
Materials Sector SPDR ETF	XLB US EQUITY	-15.56%	11%	11%	2%	-11%	0.4	0.1	21.1	-14%	65%	23.5	8%	72%
Communication Services	XLC US EQUITY		28%	28%	18%	-9%			22.2	-27%	64%	28.4	2%	85%
INTERNATIONAL EQUITIES														
Euro Stoxx 50 Index	SX5E INDEX	-9.61%	-3%	-3%	16%	21%	-0.4	-0.6	17.3	19%	47%	16.8	-5%	35%
I-Shares China Large-Cap ETF	FXI US EQUITY	-10.99%	0%	0%	-12%	-13%	0.4	-0.2	24.6	-23%	58%	24.6	-12%	57%
I-Shares MSCI Japan ETF	EWJ US EQUITY	-11.64%	-4%	-4%	-8%	-20%	0.0	-0.5	18.3	-7%	63%	17.5	11%	45%
I-Shares MSCI Emerging Markets ETF	EEM US EQUITY	-15.70%	-7%	-7%	-11%	-16%	-0.1	-0.5	24.0	-20%	71%	22.2	-12%	56%
CURRENCIES														
PowerShares US Dollar Index ETF	UUP US EQUITY	8.07%	27%	27%	96%	33%	0.4	0.7	6.0	1%	22%	7.6	-3%	35%
Currency Shares Japanese Yen ETF	FXJ US EQUITY	-0.48%	11%	11%	8%	27%	0.1	0.2	5.2	-6%	4%	5.8	-18%	2%
Currency Shares Euro Trust ETF	FXE US EQUITY	-6.17%	-5%	-5%	1%	30%	-0.5	-0.5	6.9	6%	21%	6.6	-22%	8%
Currency Shares British Pound ETF	FXB US EQUITY	-6.74%	1%	1%	34%	35%	-0.7	-0.2	11.0	-4%	81%	11.1	-28%	76%
COMMODITIES														
United States Natural Gas Fund ETF	UNG US EQUITY	23.11%	-33%	-33%	-19%	-8%	-2.1	-2.2	110.9	19%	100%	74.2	-13%	98%
SPDR Gold Shares ETF	GLD US EQUITY	-4.67%	23%	23%	18%	-9%	1.2	1.0	7.4	-35%	0%	9.1	-12%	1%
PowerShares DB Agriculture Fund ETF	DBA US EQUITY	-8.21%	48%	48%	43%	31%	1.3	0.8	8.8	-20%	14%	13.0	-9%	22%
United States Oil Fund ETF	USO US EQUITY	-12.99%	-12%	-12%	-5%	33%	-0.9	-0.9	45.9	52%	89%	40.6	1%	79%
PowerShares DB Base Metals Fund ETF	DBB US EQUITY	-16.74%	28%	28%	47%	56%	0.0	-0.2	15.3	4%	26%	19.6	-15%	30%
FIXED INCOME														
I-Shares 7-10 Year Treasury Bond ETF	IEF US EQUITY	-0.51%	65%	65%	465%	5%	0.8	1.3	3.4	-13%	3%	5.7	37%	33%
I-Shares IBOXX HY Corporate Bond ETF	HYG US EQUITY	-0.66%	9%	9%	27%	53%	-0.2	-0.3	6.1	17%	49%	6.6	-17%	37%
I-Shares 20+ Year Treasury Bond ETF	TLT US EQUITY	-3.73%	25%	25%	27%	16%	1.7	1.5	7.9	-7%	2%	9.9	1%	13%
I-Shares IBOXX IG Corporate Bond ETF	LQD US EQUITY	-4.06%	36%	36%	42%	28%	1.4	0.9	3.3	-9%	2%	4.4	-4%	8%
I-Shares J.P. Morgan USD EM Bond ETF	EMB US EQUITY	-5.84%	-17%	-17%	6%	76%	-1.6	-1.7	6.3	55%	59%	5.2	-27%	11%

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	-2.08%	-3.48%	-5.76%	-12.36%	-8.50%	-4.39%	-2.08%	-7.76%	-4.78%
Nasdaq 100 Index	NDX	-2.22%	-3.51%	-4.75%	-14.54%	-11.42%	0.84%	-2.22%	-7.20%	0.81%
Dow Jones Industrial Average	INDU	-2.11%	-3.40%	-5.93%	-9.79%	-6.29%	-4.04%	-2.11%	-7.62%	-4.56%
Russell 2000 Index	RTY	-2.32%	-4.50%	-8.28%	-19.96%	-18.20%	-9.60%	-2.32%	-10.12%	-10.25%
SPDR S&P 500 ETF Trust	SPY	-1.96%	-3.30%	-5.49%	-12.21%	-8.38%	-4.27%	-1.96%	-7.36%	-4.31%
Consumer Discretionary Select Sector SPDR ETF	XLY	-2.54%	-3.60%	-6.75%	-14.70%	-11.13%	2.20%	-2.54%	-7.65%	1.05%
Financials Select Sector SPDR ETF	XLF	-0.99%	-3.07%	-8.99%	-14.98%	-13.01%	-13.89%	-0.99%	-11.01%	-14.01%
Health Care Select Sector SPDR ETF	XLV	-1.99%	-4.09%	-3.47%	-6.78%	1.85%	3.82%	-1.99%	-9.05%	5.45%
Technology Select Sector SPDR ETF	XLK	-2.12%	-3.50%	-5.18%	-15.67%	-12.53%	-1.48%	-2.12%	-6.98%	-1.17%
Communication Services Sector SPDR ETF	XLC	-1.95%	-2.22%	-4.49%	-11.60%			-1.95%	-5.00%	
Consumer Staples Select Sector SPDR ETF	XLP	-2.31%	-2.70%	-4.95%	-2.78%	3.82%	-6.45%	-2.31%	-5.37%	-6.42%
Industrials Select SPDR ETF	XLI	-1.64%	-3.30%	-7.20%	-16.59%	-12.78%	-11.96%	-1.64%	-9.08%	-12.85%
Materials Select Sector SPDR ETF	XLB	-1.71%	-3.09%	-6.51%	-15.10%	-16.53%	-15.48%	-1.71%	-7.64%	-16.67%
Energy Select Sector SPDR ETF	XLE	-1.82%	-3.35%	-6.83%	-17.91%	-20.12%	-12.28%	-1.82%	-7.79%	-15.64%
Utilities Select Sector SPDR ETF	XLU	-3.22%	-2.79%	0.90%	1.27%	10.80%	-0.74%	-3.22%	-1.08%	4.38%
Real Estate Select SPDR ETF	XLRE	-3.74%	-4.91%	-3.25%	-4.20%	1.13%	-3.74%	-3.74%	-4.96%	-2.34%
I-Shares US Telecommunications ETF	IYZ	-2.47%	-3.63%	-4.32%	-10.45%	-4.11%	-10.18%	-2.47%	-6.62%	-8.84%
I-Shares Russell 2000 ETF	IWM	-2.55%	-4.58%	-8.32%	-20.05%	-18.32%	-9.72%	-2.55%	-10.22%	-10.13%
I-Shares Russell 2000 Value ETF	IWN	-2.47%	-4.42%	-8.81%	-18.18%	-17.21%	-12.07%	-2.47%	-10.04%	-11.96%
I-Shares Russell 2000 Growth ETF	IWO	-2.73%	-4.90%	-7.95%	-21.91%	-19.32%	-7.64%	-2.73%	-10.48%	-8.53%
I-Shares Russell 1000 ETF	IWB	-2.71%	-4.09%	-6.17%	-13.34%	-9.62%	-5.23%	-2.71%	-8.20%	-5.41%
I-Shares Russell 1000 Value ETF	IWD	-2.59%	-3.98%	-6.40%	-11.40%	-8.32%	-8.64%	-2.59%	-8.37%	-9.01%
I-Shares Russell 1000 Growth ETF	IWF	-2.59%	-3.93%	-5.73%	-14.99%	-10.69%	-1.75%	-2.59%	-7.77%	-1.86%
Power Shares QQQ Trust ETF	QQQ	-2.27%	-3.46%	-4.70%	-14.44%	-11.36%	0.92%	-2.27%	-7.05%	1.07%

U.S. Equities: Returns

U.S. EQUITIES	Ticker	D/D %	W/W%	1M%	3M%	6M%	Y/Y%	WTD%	MTD%	YTD%
Facebook	FB	-2.69%	-1.17%	-2.79%	-13.63%	-28.77%	-21.37%	-2.69%	-0.30%	-20.55%
Amazon	AMZN	-4.46%	-7.32%	-4.88%	-22.80%	-11.77%	30.65%	-4.46%	-10.01%	30.05%
Apple	AAPL	-0.93%	-3.34%	-12.24%	-26.76%	-14.08%	-4.84%	-0.93%	-8.20%	-3.13%
Netflix	NFLX	-1.51%	-2.56%	-8.35%	-27.91%	-33.11%	39.89%	-1.51%	-8.15%	36.90%
Google	GOOG	-2.45%	-2.21%	-2.60%	-13.30%	-11.77%	-2.31%	-2.45%	-7.12%	-2.85%
SPDR Dow Jones Industrial Average ETF Trust	DIA	-2.07%	-3.38%	-5.77%	-9.72%	-6.17%	-4.01%	-2.07%	-7.47%	-4.43%
I-Shares Transportation Average ETF	IYT	-1.51%	-5.01%	-10.20%	-18.82%	-14.92%	-9.92%	-1.51%	-13.33%	-11.68%
SPDR Oil & Gas Exploratioin & Production ETF	XOP	-2.99%	-7.54%	-17.68%	-31.72%	-32.33%	-18.98%	-2.99%	-13.99%	-24.10%
I-Shares Nasdaq Biotechnology ETF	IBB	-1.65%	-3.44%	-1.64%	-14.88%	-9.99%	-6.06%	-1.65%	-8.11%	-6.11%
SPDR S&P Metals & Mining ETF	XME	0.18%	-2.20%	-10.76%	-19.95%	-29.08%	-19.14%	0.18%	-6.58%	-25.43%
VanEck Vectors Gold Miners ETF	GDX	2.44%	2.38%	9.45%	14.63%	-9.05%	-6.99%	2.44%	7.96%	-11.32%
I-Shares US Home Construction ETF	ITB	-0.86%	-2.14%	-3.18%	-20.57%	-23.84%	-28.71%	-0.86%	-6.95%	-31.11%
SPDR S&P Insurance ETF	KIE	-1.22%	-2.68%	-6.45%	-12.67%	-8.30%	-8.00%	-1.22%	-8.65%	-7.85%
SPDR S&P Regional Banking ETF	KRE	-0.58%	-4.93%	-10.80%	-22.25%	-24.73%	-17.84%	-0.58%	-13.52%	-18.06%
VanEck Vectors Semiconductor ETF	SMH	-0.95%	-0.85%	-3.41%	-15.82%	-18.45%	-8.08%	-0.95%	-7.18%	-8.19%
SPDR S&P Retail ETF	XRT	-2.17%	-5.47%	-13.32%	-20.61%	-16.46%	-7.93%	-2.17%	-11.31%	-9.01%
I-Shares US Broker-Dealers & Security Exchanges ET	IAI	-1.76%	-3.69%	-7.71%	-13.40%	-18.29%	-10.99%	-1.76%	-8.87%	-10.92%
I-Shares US Oil Equipment & Services ETF	IEZ	-1.47%	-6.05%	-18.29%	-36.27%	-39.50%	-34.14%	-1.47%	-15.08%	-38.56%
I-Shares Pharmaceuticals ETF	IHE	-2.56%	-5.80%	-4.32%	-13.64%	-7.15%	-7.64%	-2.56%	-8.37%	-6.48%
I-Shares US Medical Devices ETF	IHI	-2.83%	-4.24%	-3.15%	-11.03%	-4.00%	13.66%	-2.83%	-8.38%	14.36%
Vanguard REIT ETF	VNO	-3.77%	-6.05%	-4.76%	-7.81%	-3.88%	-9.37%	-3.77%	-6.50%	-7.63%
SPDR Dow Jones REIT ETF	RWR	-3.73%	-5.38%	-4.02%	-6.38%	-2.39%	-5.21%	-3.73%	-5.87%	-4.23%

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

	SECURITY	TICKER	PRICE (\$)	DD %	5D %	1Mth %	3Mth %	6Mth %	1Yr %	MTD %	QTD %	YTD %
VALUE	iShares Russell 1000 Value ETF	IWD US Equity	\$117.98	0.31%	-2.54%	-3.14%	-6.51%	-3.76%	-2.79%	-4.45%	-6.82%	-3.41%
	Vanguard Value ETF	VTV US Equity	\$103.81	0.38%	-2.39%	-2.93%	-5.77%	-1.83%	-0.03%	-4.42%	-6.21%	-0.55%
	Alpha Architect Quantitative Value ETF	QVAL US Equity	\$26.95	0.78%	-4.91%	-7.43%	-14.42%	-16.54%	-9.99%	-6.78%	-13.09%	-11.60%
	Invesco S&P 500 Pure Value ETF	RPV US Equity	\$60.98	0.81%	-3.80%	-7.58%	-11.33%	-9.86%	-5.70%	-6.41%	-11.17%	-6.62%
	iShares Edge MSCI USA Value ETF	VLUE US Equity	\$77.65	0.77%	-3.12%	-5.84%	-10.73%	-9.42%	-4.91%	-5.50%	-11.61%	-5.57%
MOMENTUM	iShares Edge MSCI USA Momentum ETF	MTUM US Equity	\$105.72	0.62%	-1.09%	-1.92%	-9.79%	-6.69%	3.81%	-2.82%	-11.16%	3.32%
	Invesco DWA Momentum ETF	PDP US Equity	\$51.17	0.87%	-1.80%	-2.61%	-14.21%	-10.94%	0.01%	-4.21%	-14.13%	-0.82%
	Alpha Architect Quantitative Momentum ETF	QMOM US Equity	\$26.79	1.66%	-0.40%	-3.05%	-21.12%	-17.74%	-5.69%	-2.68%	-21.20%	-6.33%
	SPDR Russell 1000 Momentum ETF	ONEO US Equity	\$67.09	0.88%	-2.39%	-4.43%	-12.02%	-10.54%	-6.03%	-4.57%	-11.90%	-6.78%
	Fidelity Momentum Factor ETF	FDMO US Equity	\$31.48	0.74%	-1.53%	-2.57%	-10.02%	-7.50%	2.05%	-3.39%	-10.96%	1.46%
GROWTH	iShares Russell 1000 Growth ETF	IWF US Equity	\$138.89	0.78%	-1.07%	-1.84%	-9.86%	-5.39%	4.61%	-3.09%	-10.96%	4.03%
	Nasdaq 100 Index	QQQ US Equity	\$165.05	0.88%	-0.40%	-0.77%	-9.44%	-5.76%	6.83%	-2.55%	-11.16%	6.56%
	Invesco S&P 500 Pure Growth ETF	RPG US Equity	\$106.28	1.00%	-1.12%	-0.86%	-10.88%	-10.59%	1.61%	-3.19%	-11.62%	1.66%
	Vanguard Growth ETF	VUG US Equity	\$142.88	0.77%	-1.11%	-1.90%	-10.01%	-6.53%	2.96%	-2.99%	-11.28%	2.42%
	iShares North American Tech-Software ETF	IGV US Equity	\$182.41	1.37%	0.50%	2.36%	-10.43%	-4.26%	17.66%	-1.75%	-11.01%	18.05%
LOW VOL & YIELD	iShares Edge MSCI Min Vol USA ETF	USMV US Equity	\$55.40	0.11%	-1.04%	-0.86%	-2.41%	4.14%	6.69%	-1.95%	-2.88%	6.49%
	Invesco S&P 500 Low Volatility ETF	SPLV US Equity	\$49.10	-0.32%	-1.27%	-0.43%	-1.58%	4.92%	4.47%	-2.09%	-0.49%	4.85%
	Invesco S&P 500 High-Div Low-Vol ETF	SPHD US Equity	\$40.33	-0.30%	-1.56%	-1.59%	-2.95%	0.53%	-1.39%	-2.70%	-1.95%	-1.31%
	Vanguard High Dividend Yield ETF	VYM US Equity	\$82.79	0.36%	-2.00%	-2.30%	-4.74%	-2.20%	-0.60%	-3.98%	-4.94%	-1.11%
	iShares Select Dividend ETF	DVY US Equity	\$95.65	0.39%	-1.24%	-1.97%	-5.35%	-1.75%	0.13%	-2.25%	-4.12%	-0.49%
QUALITY	iShares Edge MSCI USA Quality Factor ETF	QUAL US Equity	\$81.46	0.52%	-1.45%	-3.32%	-8.85%	-4.83%	-0.07%	-3.37%	-9.86%	-0.44%
	Invesco S&P 500 Quality Factor ETF	SPHQ US Equity	\$29.50	0.55%	-1.24%	-3.47%	-8.32%	-4.91%	-1.32%	-2.99%	-10.06%	-1.97%
	Fidelity U.S. Quality Factor ETF	FQAL US Equity	\$31.80	0.60%	-1.33%	-2.29%	-7.59%	-3.81%	1.68%	-3.52%	-8.15%	1.18%
	Barron's 400 ETF	BFOR US Equity	\$38.06	0.86%	-2.44%	-5.83%	-16.51%	-13.90%	-6.75%	-5.75%	-15.39%	-8.47%
	Vanguard U.S. Quality Factor ETF	VFQY US Equity	\$74.98	1.12%	-1.73%	-5.03%	-12.25%	-9.66%	NA	-4.54%	-12.37%	NA