Negative pricing – why it happens and its implications

13, 2020



Negative Pricing – Why It Happens & Its Implications

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OPEC + ECONOMIC PRAGMATISM DIDN'T PROVIDE RELIEF INITIALLY

Mb/d	2018	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2 Q 20	3Q20	4Q20	2020
World demand	99.1	99.2	99.2	100.6	100.8	100.0	92.9	80.7	95.6	102.0	92.8
OECD Demand	47.9	47.7	47.0	48.1	47.7	47.6	43.8	34.4	45.0	48.9	43.0
Non-OECD demand	51.3	51.5	52.3	52.6	53.1	52.4	49.1	46.3	50.6	53.1	49.8
World supply	100.3	100.2	99.9	100.0	101.6	100.4	100.7	102.6	101.2	100.3	101.2
OPEC crude	31.9	30.7	30.1	29.5	29.8	30.0	29.0	31.5	31.6	32.2	31.1
OPEC NGLs	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6	5.6	5.6
non-OPEC supply	62.9	64.0	64.3	65.0	66.3	64.9	66.0	65.5	64.0	62.5	64.5
Balance	1.15	1.07	0.62	-0.66	0.78	0.5	7.7	22.0	5.6	-1.7 /	8.4

Table-1.-Supply-and-demand-table-before-the-OPEC++-9.7mb/d-cutg

Forecasts from 2Q20+

Source:-SG-Cross-Asset-Research/Commodities,-IEA,-S&P-Plattsz

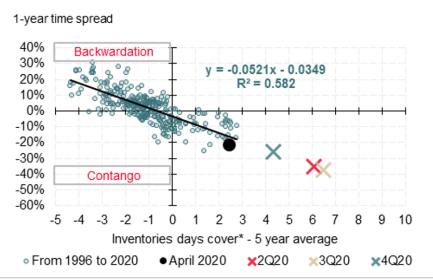
OPEC+ cuts of 9.7mb/d until July, then 8mb/d. Cuts until 2021.

The non-Opec supply responses is in full swing. Chevron, ExxonMobil, Continental, Conoco Phillips cut around 1.2mb/d. Others around 400kb/d in US. In Canada around 600kb/d. Norway, Brazil, Ecuador, Kazakstan around 1.1mb/d. Total: around 3.3mb/d. With some OPEC + already underway (Saudi's 2mb/d) we could be down over 7mb/d already. So with rest of OPEC+ should be 13mb/d.

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Mb/d	2Q20	3Q20	4Q20
World demand	80.7	95.6	102.0
OECD Demand	34.4	45.0	48.9
Non-OECD demand	46.3	50.6	53.1
World supply	95.0	94.2	94.3
OPEC crude	26.5	27.1	28.2
OPEC NGLs	5.6	5.6	5.6
non-OPEC supply	62.8	61.5	60.5
Balance	14.3	-1.4	-7.7

OPEC + ECONOMIC PRAGMATISM DIDN'T PROVIDE RELIEF (2)

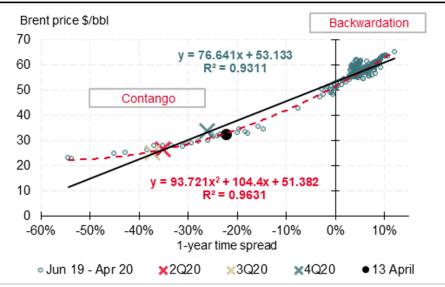
9.7mb/d OPEC+ cuts – The supply curtailment should slightly mitigate the super contango, but it's still massive



Source: SG Cross Asset Research/Commodities, IEA, S&P Platts

* Total OECD crude and products industry stocks divided by global forward consumption

With 9.7mb/d OPEC+ cuts – As time spreads are less extreme the linear relationship seems to be a good fit

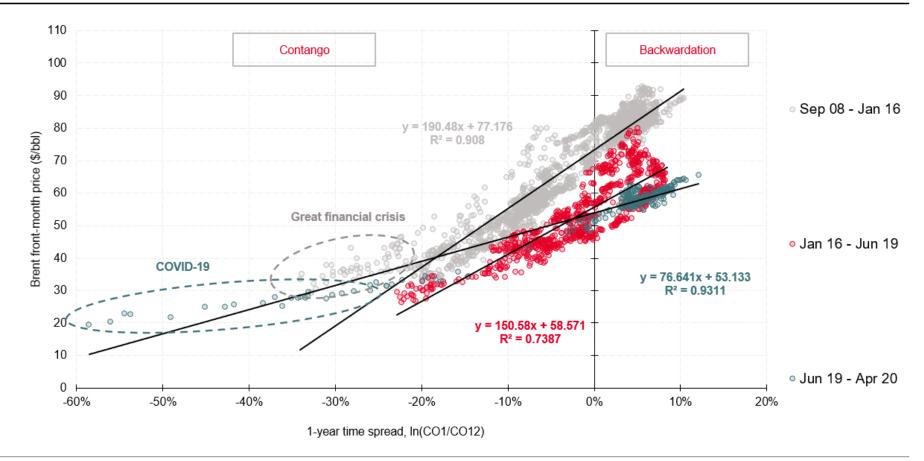


Source: SG Cross Asset Research/Commodities, IEA, S&P Platts



A NEW REGIME

The same non-linear relationship between extremely negative time spreads and Brent prices was already observed during the 2008 GFC, when prices found a floor in the \$30-35/bbl range; during the COVID-19 crisis, the floor seems to be much lower



Source: SG Cross Asset Research/Commodities



BEAR CASE, OPEC+ MODEL AND SG FORECASTS

With 9.7mb/d OPEC+ cuts – In this scenario, the inventories day cover build less as oversupply is partially contained; the day cover should be at similar levels to the GFC

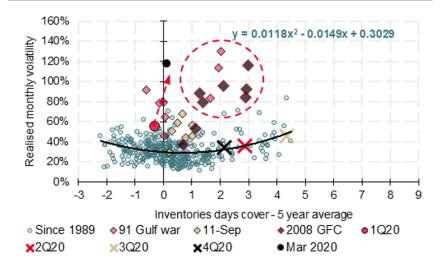


Table 2. SG Brent prices forecasts vs model's output for base case and for OPEC+ 9.7mb/d cuts

	Bre	ent prices* (\$/b	obl)	12 month	time spread (o	contango)	Brent realised volatility**			
	Model's	outputs	SG forecasts	Model's outputs		SG forecasts	Model's	SG forecasts		
Quarter	Bear case	OPEC+ cuts	SG TOPECasts	Bear case	OPEC+ cuts	SG TOPECasts	Bear case	OPEC+ cuts	Surficeasts	
2Q20	22.41	26.31	30.00	-40%	-35%	-40%	46%	36%	90 - 110%	
3Q20	14.04	24.67	35.00	-51%	-37%	-35%	93%	46%	40 - 60%	
4Q20	15.19	33.21	40.00	-50%	-26%	-30%	85%	34%	30 - 40%	

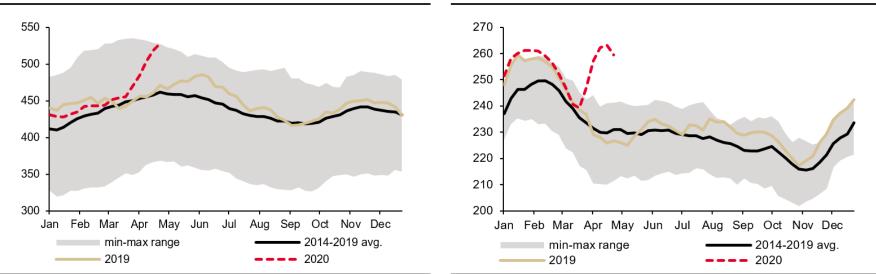
Source: SG Cross Asset-Research/Commodities

* Front-month Brent prices, ** Brent front-month contract monthly (22 days) volatility, annualised

TURNING POINT?

Total US Commercial Crude Stocks (MMBbls)

Total motor gasoline (blendstocks and finished) stocks (MMBbls)

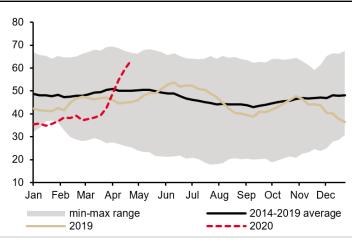


Source: SG Cross Asset Research/Commodities, DOE/EIA

Source: SG Cross Asset Research/Commodities, DOE/EIA

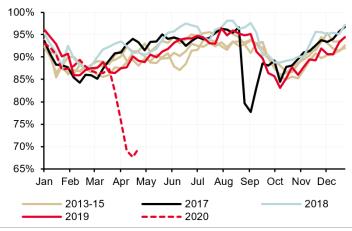


SOME SIGNS OF A TURNAROUND

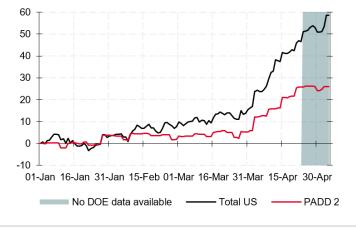


Cushing Crude Oil Stocks (MMBbls)

Source: SG Cross Asset Research/Commodities, DOE/EIA



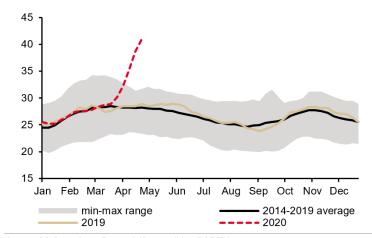
US Refinery utilization rates



US and PADD 2 stock changes since January 2020 (MMBbls)

Source: SG Cross Asset Research/Commodities, Kpler

Total US crude days cover (days)



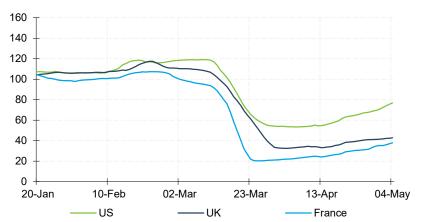
Source: SG Cross Asset Research/Commodities, DOE/EIA

Source: SG Cross Asset Research/Commodities, DOE/EIA

ON THE ROAD AGAIN? DEMAND SLOWLY COMING BACK

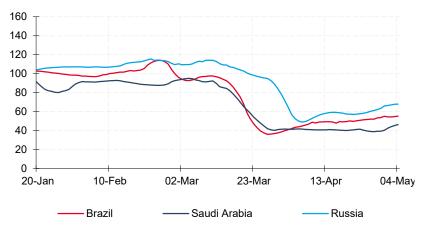
Sharp decline for driving itineraries search on Apple maps with lockdown implementation

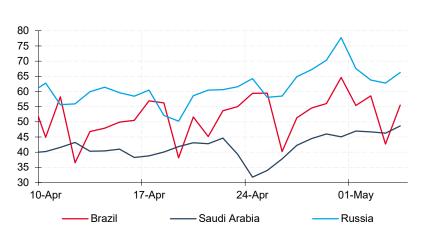
(7 days moving average - base at 100 on 13 January)



A timid restart over the past two weeks as lockdowns and enforcements are easing (actual daily data - base at 100 on 13 January)









Source: SG Cross Asset Research/Commodities, Apple maps, Mobility Trends Reports

Appendix

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