Capital Markets

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Oil Strategy: Pricing the Price War Scenarios

To better help guide toward logical goal posts in a market that can swing 30% overnight, we have outlined various scenarios and price ranges. Our base case sees Saudi returning output to levels approaching the 2018 highs. US production growth begins to roll come Q4'20. Chinese oil demand picks up meaningfully in 2H'20, but the rest of the world remains tepid. Nearly a million barrels a day of demand growth is destroyed, leaving global growth clocking in largely flat to last year.

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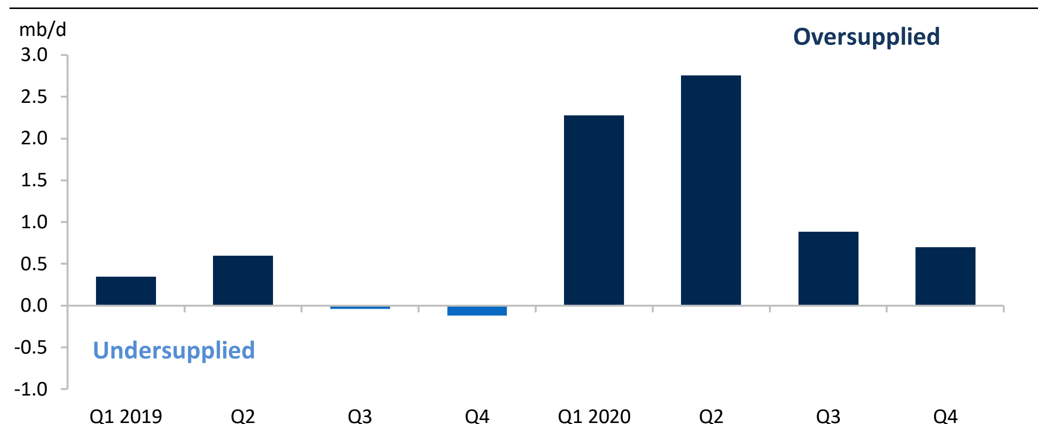
The impact of COVID-19 was always viewed as transitory and measured in months or quarters at worst, but the OPEC-inflicted price war means that demand will likely return before supply is curtailed. The staring contest between Saudi Arabia and Russia is likely to lead to a painful and protracted path for oil prices. Such action will test the market's self-balancing mechanism absent the backstop of OPEC, a mechanism that has not been tested since the US shale boom was in its infancy. Price wars and pandemics are nothing new to the commodity markets, but both occurring simultaneously is something we have yet to witness in our careers. And, there is no near-term end in sight. Over the weekend, the Saudis slashed Official Selling Prices (OSP) by the most on record, to their customers across all jurisdictions, sending a clear signal that the Kingdom is looking to aggressively place its barrels and win market share, even if it means enduring lower prices. For example, the Saudis slashed their prized Arab Light crude into Europe by a record $10.25/bbl discount relative to the Brent benchmark (see Figure 2). In comparison, the average OSP into Europe for an Arab Light crude priced at a $1.30/bbl discount last year and a $3.15/bbl discount throughout the 2014–15 price war. Several other OPEC nations have followed suit on pricing in line with current market conditions. There are no illusions about the arduous path ahead. We see prices averaging $34.30/bbl and $39/bbl through the balance of the year for WTI and Brent, respectively. In an environment where 30% swings over a weekend are reality, forecasting pricing during panics and hysteria is an exercise in futility. To better help guide toward logical goal posts, we have outlined the case for sub $30 as well as scenarios for a $30s and $40s price path over the near and medium term (see pages 3–4).

The duration of the demand impact on COVID-19 was debatable among the investor community, but most anticipated a multi-month or multi-quarter footprint on global oil demand. While the market debated the outline of the recovery, whether V-, U-, W-, or L-shaped, the added layer of a price war means that any recovery is surely to be protracted. Without an OPEC backstop, subdued demand matched with un-curated supply leads to a self-balancing mechanism, meaning that global demand must pick up meaningfully or else price-elastic US production becomes caught in the crossfire.

Figure 1: Global Oil Supply and Demand Balances



Source: RBC Capital Markets, RBC Capital Markets estimates, Petro-Logistics SA, IEA, IEA, JODI, company and government sources

All values in USD unless otherwise noted.

Priced as of prior trading day's market close, ET (unless otherwise stated).

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Figure 2: Saudi Arab Light OSP Pricing Diff by Region

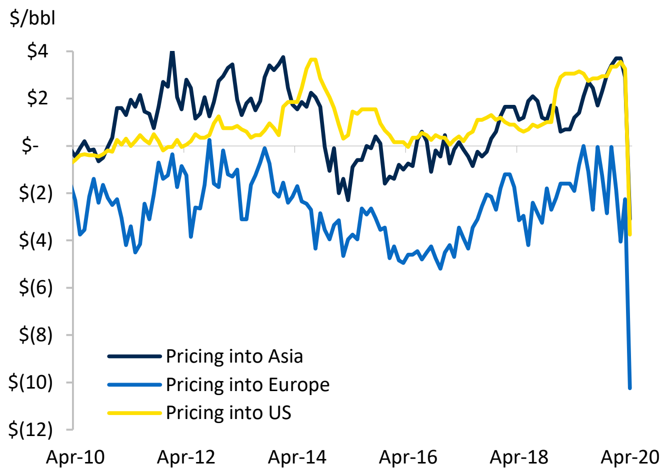
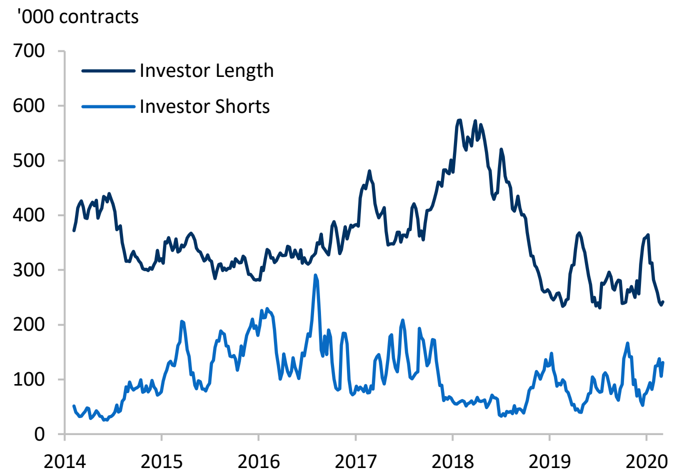


Figure 3: Investor Positioning in WTI



Source: RBC Capital Markets, Saudi Aramco, CFTC

The next several months and quarters will likely be unrelentingly painful and an exercise in pain endurance, but as demand picks up post coronavirus, a structural rebound higher could be in the cards as long as US production remains in check given that the cupboard for global non-OPEC, ex-US production growth is largely bare bones over the coming years.

The unprecedented pairing of a price war and pandemic remains open-ended from a duration standpoint, and even if demand begins to turn markedly higher, the excess crude piling up in storage will be a high hurdle to clear. Who blinks first? Price-elastic US production is likely the release valve wherein several shale producers have already announced plans to idle rigs. Simply put, the duration of the pain point may be predicated on how quickly domestic producers begin to reel in production profiles. Our US E&P equity analysts estimate that many shale producers have hedge protection for some 45–65% of 2020 output, but price protection for 2021 remains largely empty.

Given the attacks on Abqaiq in the fall and the height of the US and Iran conflict earlier this year, oil producers have had ample opportunity to lock in pricing at attractive levels. While producers have hedges in place, many have three-way collars where a lower strike put was sold to juice the upside call option. For example, a popular structure over recent quarters has been buying a $55/bbl put on WTI and financing it by selling a $65 or $70/bbl call, a structure made possible by selling an additional $45/put option. In plain English, producers are hedged if, and only if, oil prices remain above $45/bbl and they are fully exposed below that level. Put simply, US production is likely less well hedged than the market realizes given the swift nature of the price volatility. Lingering price pain in the current environment would likely place significant downward pressure on 2H'20 production profiles and beyond.

Figure 4: Oil Price Forecasts, Period Averages

Price Forecast ($/bbl)	2019					2020				
	Q1	Q2	Q3	Q4	'19 Avg	Q1	Q2	Q3	Q4	'20 Avg
WTI	$54.90	$59.91	$56.44	$56.87	**$57.04**	*$47.50*	*$32.00*	*$34.00*	*$37.00*	***$37.60***
Brent	$63.83	$68.47	$62.03	$62.42	**$64.16**	*$51.05*	*$36.00*	*$39.00*	*$42.00*	***$42.00***
WTI-Brent Spread	-$8.93	-$8.56	-$5.59	-$5.55	**-$7.12**	*-$3.55*	*-$4.00*	*-$5.00*	*-$5.00*	***-$4.40***

Source: RBC Capital Markets estimates

Lines in the Sand

Investor length in WTI has trended near the lows of the decade and well below when prices fell to $26/bbl back in 2016. One can make the argument that there is not much further length to flush out (see Figure 3). Alternatively, while investor shorts are at a relative high, short interest rests some 9% below the 2015–17 average and not even at half of the high seen in February 2016 when oil prices bottomed. Given the challenged near-term structural backdrop, investors see rallies as selling opportunities. Prices will bottom and rebound once supply capitulation takes place and that may entail a dip below $30/bbl, but from a physical market standpoint, Brent term structure appears oversold. Here's why: the Brent contango is pricing 60¢/bbl between contract months for the six-month strip, which are the economics needed for global floating storage to be economic. In other words, the term structure is currently priced for storage containment issues. While headlines of floating storage will resonate louder the longer the oversupply lasts, we have a high level of difficulty seeing an issue in which regional storage challenges tank tops over the near or medium term. We see this scenario as highly unlikely given that discretionary onshore storage capacity in China, ARA, and Saldanha Bay remain ample and total near 530 mb of capacity. In other words, unless physical storage capacity becomes challenged over the near term, time spreads are currently pricing in the worst-case scenario.

Figure 5: Global Supply and Demand Balances

Global Supply & Demand Balance	2019					2020				
mb/d	Q1	Q2	Q3	Q4	YoY	Q1	Q2	Q3	Q4	YoY
Demand										
OECD	47.2	46.6	47.5	47.2	**-0.4**	*46.1*	*46.2*	*47.1*	*47.1*	***-0.5***
Non-OECD	51.9	52.6	53.3	53.8	**1.1**	*51.1*	*53.7*	*54.7*	*54.7*	***0.6***
Total Demand	**99.1**	**99.2**	**100.8**	**101.0**	**0.7**	***97.2***	***99.8***	***101.7***	***101.8***	***0.1***
Supply										
OPEC Crude	30.5	29.7	29.2	29.2	**-2.1**	*28.5*	*30.5*	*30.5*	*30.5*	***0.4***
OPEC Other Liquids	5.3	5.3	5.4	5.4	**-0.2**	*5.3*	*5.3*	*5.4*	*5.4*	***0.0***
Non-OPEC Crude & Biofuels & Proc Gain	63.7	64.8	66.2	66.3	**1.8**	*65.7*	*66.8*	*66.8*	*66.6*	***1.2***
Total Supply	**99.5**	**99.8**	**100.7**	**100.9**	**-0.4**	***99.5***	***102.6***	***102.6***	***102.5***	***1.6***
Stock Change	0.3	0.6	0.0	-0.1		*2.2*	*2.8*	*0.9*	*0.7*	
Call on OPEC	30.2	29.1	29.2	29.3		*26.3*	*27.7*	*29.6*	*29.8*	

Source: RBC Capital Markets estimates, Petro-Logistics SA, IEA, IEA, JODI, company and government sources

The Road Ahead: Scenario Analysis

Prices will rebound upon production capitulation, but calling the bottom is difficult. The longer the price war plays out, the lower the price ceiling becomes when the market rebounds given that barrels will pile into inventory in the meantime. This means that the market will have to work off a significant glut before prices can meaningfully rebound. The news over recent days has been a barrage of bearish headlines. The objective of a price war, after all, is to push producers toward the point of maximum pain and capitulation. The pricing environment is challenging and the short-term environment will almost certainly worsen before it improves, but how bad is the situation? We outline a number of near- and medium-term bull, bear, and base case scenarios.

The $30–40/bbl WTI Base Case Assumptions (40% Probability)

Saudi returns production to the 10.7–11 mb/d range, or levels approaching the 2018 highs. US shale producers have already announced plans to idle rigs and reduce production activity, and while the number of E&Ps will almost certainly follow suit, production growth begins to roll over come Q4'20. Chinese oil demand picks up meaningfully in 2H'20, but the rest of global oil demand remains tepid. Nearly a million barrels a day of demand growth is destroyed relative to our previous estimates, leaving global growth figures clocking in largely flat to last year.

The Sub-$30/bbl WTI Bear Case Assumptions (40% Probability)

Saudi declares the price war a protracted one and ramps output to the all-time observed high near 11 mb/d. The Russians do not blink. US producers reduce activity, but not by enough to wave the white flag. Global production remains resilient. COVID-19 wreaks havoc across major oil-consuming regions, including India and the US. Libyan production returns in any capacity and the clear path toward storage tank tops emerges. We label this the bear case, but it has odds similar to those of the base case.

The $40–50/bbl WTI Bull Case Assumptions (20% Probability)

US production capitulates in early 2H'20. Troubled hotspots such as Libya, Venezuela, and Iran remain challenged. Saudi returns output to 10 mb/d rather than the peak demonstrated levels above 11 mb/d witnessed during the fall of 2018. Chinese economic activity normalizes in the near term post coronavirus and oil demand grows significantly thanks to domestic stimulus packages. The ripple effect of COVID-19 in regions outside China are either short-lived or confined to less energy-intensive demand regions such as South Korea, the Middle East, or smaller pockets of continental Europe. In other words, the global oil demand growth backdrop is firmer than the protracted, multi-quarter hit expected by the market.

Leaders and Laggards…for Whenever Prices Rebound

Refiners will likely lead the rebound whenever markets rebalance. Absent a change in Saudi or Russian policy, or US shale capitulation, improvement will have to stem from the demand side of the equation. Once consumption of refined products such as gasoline, distillate, and aviation fuel improve, product balances and storage will clean up, leading to margin expansion, primarily in Asia but also globally. Elevated global crude inventories mean that the crude complex will likely lag the rest of the oil complex as the market struggles to return to a state of equilibrium.

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