



October 14, 2021

Oil Strategy: Early Days in the Constructive Oil Cycle, Part Deux

- Next year is shaping up to be one of the rare parts of the [cycle](#) not led by supply exclusively, or demand exclusively as many cycles are. Instead, it is shaping up to be led by [both strengthening demand](#) and [tightening supply simultaneously](#). Such a dynamic has not existed, on a protracted basis, in a decade. Regardless of if truly “super” or not, we maintain the view that we have held all year – that the oil market remains in the early days of a multi-year, structurally strong cycle.
- Calling for a [re-rating of the back end](#) of the oil curve higher has been a consistent theme for us this year. And while our long held, previously ambitious target of \$75/bbl for the Cal’22 Brent strip was achieved last week, our term [price forecasts](#) are, again, inflecting higher. We see the Cal’22 Brent strip averaging \$84/bbl next year. This represents a 12% re-rating higher from our previous target. While there are near term upside scenarios for spot contracts, prices will likely remain in a push-pull between bullish sentiment, but offset by the potential for accelerated OPEC+ tapering schedules and US government policy measures if prices spike further.
- We continue to see a [three-step path](#) towards sustainably higher oil prices to accelerate the next cycle: 1) Returning inventories toward historically normal levels 2) Running down OPEC+ spare capacity and 3) An increasing market call on US shale to prevent global balances from over tightening and to avoid driving storage levels to dangerously low levels. The constructive trending data points over recent quarters have led us to fortify the conviction on our bull thesis.
- Despite [\\$100/bbl](#) headlines floated in the media, our fundamental based price modelling suggests that *a lot* of work remains in the physical market to justify such a valuation. In this report we quantify the amount of work that needs to be done to define the path toward both \$100/bbl and \$60/bbl Brent pricing. **Spoiler Alert:** Could we get there? Sure, but OECD crude inventories would have to draw by a massive 550 mb between now and June to justify a sustained \$100/bbl Brent price by mid-next year.
- Tightening inventories beget higher spot oil prices, leading to further [backwardation](#). The lack of consistent downward [producer hedging pressure](#) is a meaningful reason for why the term portion of the curve has and will likely continue to exhale higher.
- Demand for [deep out of the money call options](#) for the \$150/bbl and \$200/bbl strike lines have increased of late (from minimal levels). The \$150/bbl June WTI calls have more than quadrupled to 21¢ from 6¢ as recently as two weeks ago, while the \$200/bbl strikes are currently pricing at 6¢, up from the 1¢ to 2¢ range over recent weeks.
- While the [‘energy crisis’](#) in Europe and Asia is more of a natural gas and coal story than an oil story, the disruption is loud, clear, and occurring after years of chronic underinvestment. Taking place ahead of winter as well as COP26, the crisis serves as an acute and timely reminder for policy makers who, perhaps, have been underappreciating the path ahead for fossil fuels. The rate of change of supply tightening and demand increasing is a blueprint for firming energy prices and we believe the the market remains in the [early innings](#) of a strong, multi-year cycle.

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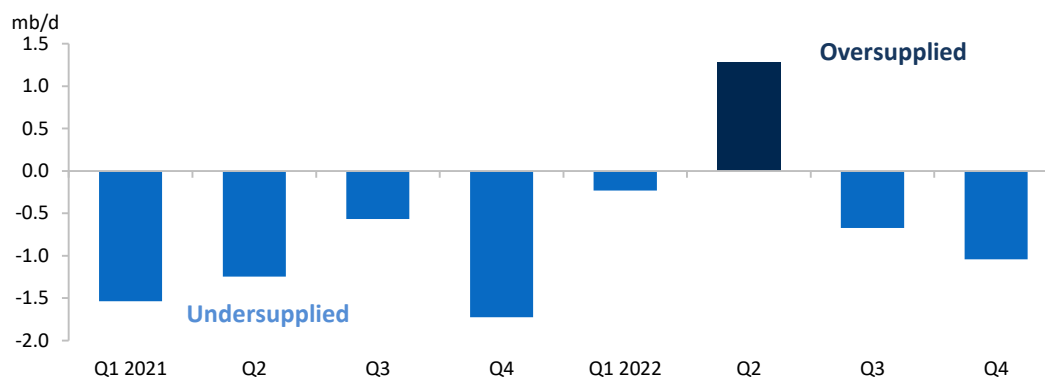
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Figure 1 - Global Supply and Demand Balance



All values in USD unless otherwise noted.

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

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

Disseminated: Oct 14, 2021 01:12EDT; Produced: Oct 14, 2021 01:12EDT

Structurally Strong

With a [line of sight](#) to returning global stockpiles toward a historical definition of ‘normal’ and a call on US shale (and other global crudes) on deck for late next year once OPEC spare capacity is exhausted, the trajectory of oil balances and prices are inflecting in the most constructive fashion in years. Next year is shaping up to be one of the rare cycles not led by supply exclusively, or demand exclusively as most cycles are. Instead, next year appears to be a cycle poised to be led by [both](#) strengthening demand and tightening supply, simultaneously. Market watchers often confuse the term [super cycle](#) as synonymous with simply higher prices, but the true market definition of a super cycle is one in which both demand and supply lead simultaneously in concert. Such a dynamic has not existed, on a protracted basis, in over a decade. Regardless of if truly “super” or not, we maintain the view that we have held all year – that the oil market remains entrenched in the early days of a multi-year, structurally strong cycle. As we outline throughout this piece, our analysis suggests that the true cornerstone building blocks of oil market fundamentals continue to firm to the point where price retracements are likely to be shallow and should be viewed as buying opportunities.

The directional path of fundamentally constructive data points continues to drive our model driven price forecast higher. Calling for a [re-rating](#) of the back end of the oil curve higher has been a consistent theme for us over the past year. And while our long held, previously seemingly ambitious target of \$75/bbl for the Cal’22 Brent strip was achieved last week, our forecasts are, again, inflecting higher for the term portion of the curve. We are projecting an average Cal’22 Brent price of \$84/bbl. This represents a 12% re-rating higher from our previous target (See Figures 13 and 14 for full pricing scenarios). While there are further upside scenarios for spot prices over the near term, prices will likely remain in a push-pull between constructive market sentiment, but offset by the potential for accelerated tapering schedules from OPEC+ and US government policy measures if prices spike further (See Figure 2).

We have often cited that while the medium term price risk asymmetry remains skewed toward the upside, the true evidence of a strong, multi-year bull cycle is the support of a strong rising price floor underpinned by rock steady inventories. Current OECD crude inventories have reverted to below pre-COVID levels, and nearly 100 mb below the five-year average. Between now and mid next year, our balances suggest an average stock draw of some 225 kb/d. If our modeling is directionally correct, OECD crude stocks will fall to a notional level of 955 mb by mid next year. Such levels are comparable to those last seen back in 2014 prior to when the Saudis started the first price war.

Figure 2 - RBC Brent Price Scenarios

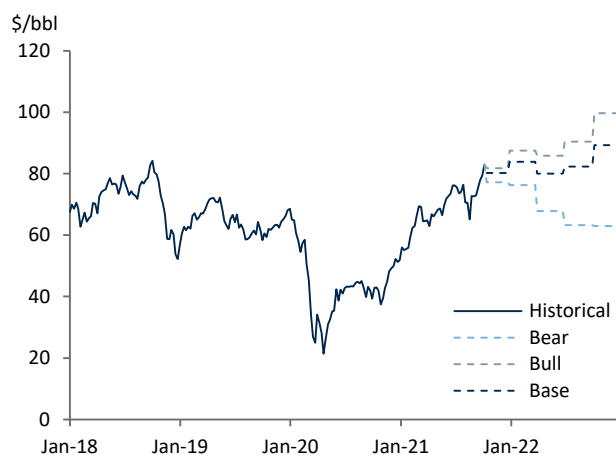
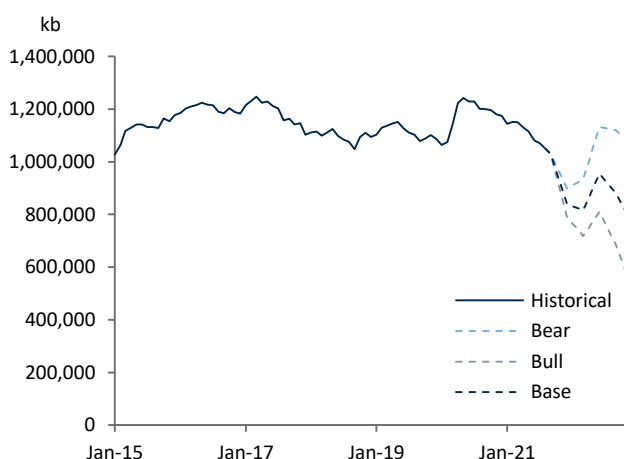


Figure 3 - OECD Crude Inventory Scenarios



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

Figure 4 - Oil Price Forecasts, Period Averages

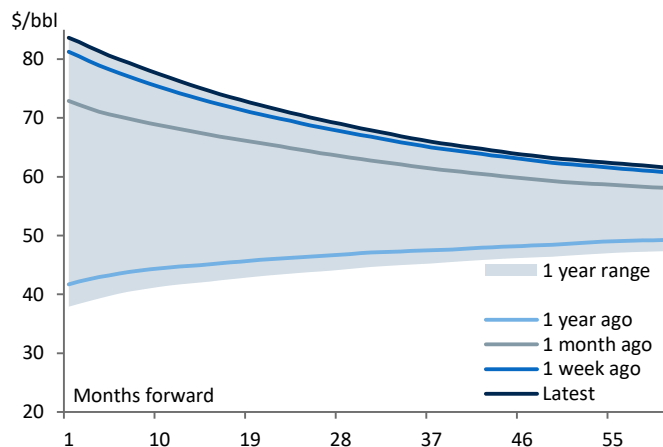
Price Forecast (\$/bbl)	2021					2022				
	Q1	Q2	Q3	Q4	'21 Avg	Q1	Q2	Q3	Q4	'22 Avg
WTI	\$58.25	\$63.25	\$70.50	\$77.00	\$67.25	\$80.75	\$77.00	\$79.50	\$86.75	\$81.00
Brent	\$61.25	\$69.00	\$73.25	\$80.25	\$71.00	\$84.00	\$80.00	\$82.25	\$89.25	\$84.00
WTI-Brent Spread	-\$3.00	-\$5.75	-\$2.75	-\$3.25	-\$3.75	-\$3.25	-\$3.00	-\$2.75	-\$2.50	-\$3.00

Source: RBC Capital Markets estimates

We anticipate accelerated stock draws in 2H'22 to average 860 kb/d as OPEC+ spare capacity becomes exhausted and the call for more non-OPEC barrels becomes fully exposed, evolving from a theoretical talking point to a reality for the market. During the second half of next year, we see OECD crude stocks falling to average of 855 kb (See Figure 3), which is the lowest level in over a decade, including the 2011-2013 Arab Spring plagued period that was consistently on a knife's edge, defined by supply side outages. That stretch was also earmarked with coordinated releases from global strategic reserves by IEA member countries. In short, the market is trending toward rarely travelled territory.

Given that reference point, while crude prices have doubled over the past year, we remain of the view that the oil market is building a strong fundamental base layer pointing toward the early innings of a strong, multi-year constructive cycle. Several OPEC countries, including Saudi, Iraq, and UAE have plans to grow productive capacity, but following a decade of chronic global under-investment, the fears of a disorderly energy transition period is likely to become a reality.

Throughout the year, we set out a [three-step path](#) towards sustainably higher oil prices to accelerate the next cycle: 1) Returning inventories toward historically normal levels 2) Running down OPEC+ spare capacity and 3) An increasing market call on US shale to prevent global balances from over tightening and to avoid driving storage levels to dangerously low levels. The three step process remains well on track and the constructive trending data points over recent quarters have only led us to fortify the conviction levels on our bull thesis.

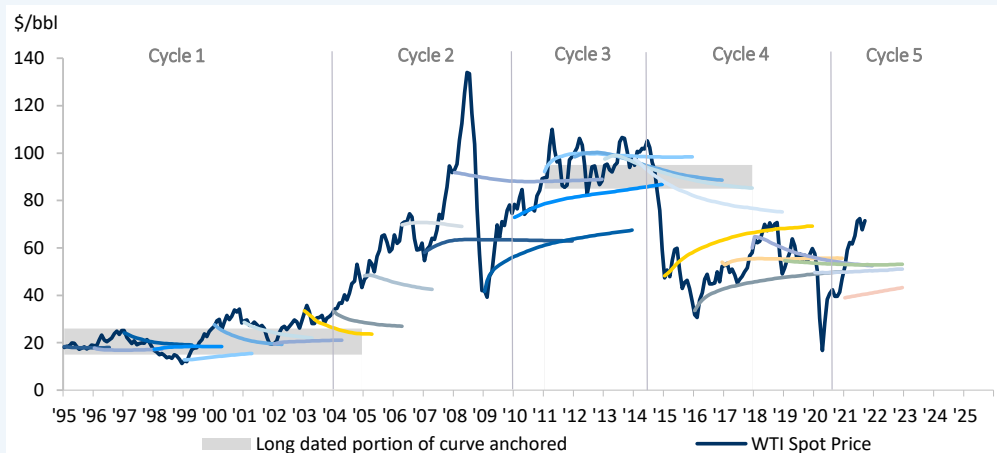
Figure 5 - Brent Forward Curve Evolution


Source: RBC Capital Markets, Bloomberg

Figure 6 - WTI 1st vs 6th Month Contract Spread


Oil's Forward Curve - A Brief History

Figure 7 - WTI Spot Price & Forward Curve*



Source: RBC Capital Markets, Bloomberg *Forward strip plotted on Jan 1 of each year

The forward curve is not a predictor of future oil prices. Visibility into the back end of the curve does little to indicate where future spot prices will trade given that the market will continue to weave between phases of contango and backwardation as warranted by physical and financial forces. In fact, the curve has ebbed and flowed through four distinct cycles over recent decades, attempting each time to anchor near the marginal cost of future production. We believe that the market is approaching the cusp of the fifth cycle:

First Cycle: Prior to 2004: Historically speaking, until the mid-2000s, oil prices would cycle through periods of contango and backwardation. Regardless of whether spot barrels priced at \$15/bbl or \$25/bbl, the forward curve was anchored near the \$20/bbl mark, which was, at the time, largely recognized as the marginal cost of producing a barrel of oil, globally.

Second Cycle: 2004-2009: In what was uncharted territory at the time, long-term oil prices became unmoored from the \$20/bbl level and the entire forward curve shifted higher alongside spot prices during the mid-2000s as peak oil fears ravaged the market and altered the perception of where the market should be pricing long-term oil. In other words, when the front end of the forward curve moved, the entire curve moved along with it. Simply put, the market was constantly contemplating the marginal cost of future production.

Third Cycle: 2010-2014: Order was restored to the forward curve at the turn of this decade as dated prices became anchored once again, this time to the \$70-\$80/bbl mark, which at the time, was thought to be the cost of marginal barrels from various unconventional sources.

Fourth Cycle: 2015-2020: The oil price volatility of the past several years is only the second cycle seen over the previous two decades to significantly unfasten the dated portion of the forward curve from the previous cycle. Over the past half-decade, the entire forward curve shifted lower in anticipation of searching for the future marginal cost of a barrel of oil. While the latest episode has yet to play out, the term portion of the forward curve has trended between the \$40-\$55/bbl range, at levels loosely economical for US shale.

Fifth Cycle: 2021-????: We believe the forward curve will continue re-rating higher. With cracks showing in US shale, and years of global underinvestment, we anticipate a scarcity shift higher to incentivize global producers to further invest in new production in the years ahead. Whether the investments will come remains an open-ended question.

The Path to \$100 and the Path to \$60 – Both Require Significantly More Work

Despite \$100/bbl headline grabbing comments floating in the media, our fundamental, regression based price modelling suggests that a lot of work remains to be done in the physical market to justify such a hefty valuation. The amount of work required for the physical market to structurally inflect the crude oil market in the near term to \$100/bbl is often underappreciated.

Our studies indicate that OECD crude inventories would have to draw a massive 550 mb between now and June to justify a sustained \$100/bbl Brent price by mid next year. That is nearly 9x our current forecasted draw over the same period. Our timespreads based modeling would imply that backwardation would blow past levels seen during the Arab Spring in 2011, with the 1 vs 6 month Brent spread approaching \$10/bbl (from current levels near \$3.45/bbl).

To be clear, this is not us ruling out \$100 oil, this is simply us quantitatively demonstrating the amount of work required to approach and sustain such levels. On the downside, falling to a \$60/bbl Brent price level is also difficult to see over the near term. By our modelling, the market would have to build by 1.1 mb/d between now and mid next year compared to our expectations for a -225 kb/d draw. That represents a 1.3 mb/d swing, in the opposite direction of our expectations in order for a sustainable plunge to \$60/bbl to be in the cards. Under such a pricing scenario, the rapid degree of stockbuilds would evaporate the steep backwardation and flip the term structure back into contango. We caveat this by saying that the figures highlighted above are founded on our regression based and time spread centric pricing models. We run this exercise with the intention of highlighting the potential path for pricing and the associated physical market implications to justify such a move. We clearly know this market is one that attracts momentum investors (see negative WTI pricing last spring) and that temporary sprints in either direction are possible, and potentially even likely.

The Continued Re-Rating of the Back End of the Curve

Assuming our trajectory of stock drawdowns over the coming quarters is directionally correct, naturally, we would expect the market to remain in a period of structural backwardation. Tightening inventories begets higher spot oil prices, leading to further backwardation. Given the theme of this report is centered on the continued re-rating of the back end of the curve, the lack of consistent downward producer hedging pressure is a meaningful reason for why the term portion of the curve has and will likely continue to exhale higher.

Figure 8 - Brent Open Interest Dispersion & Total Interest

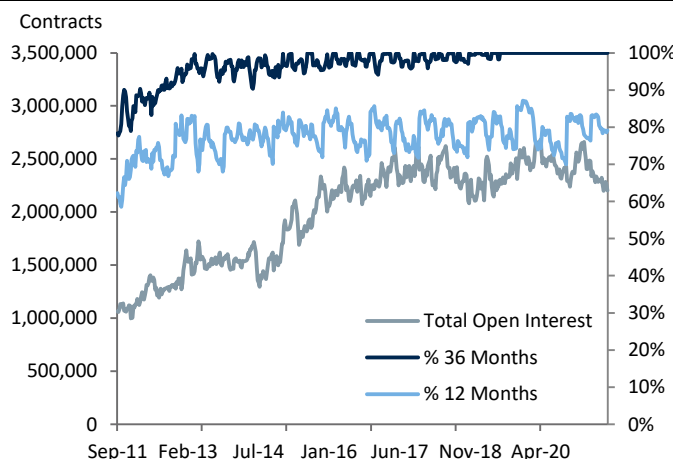
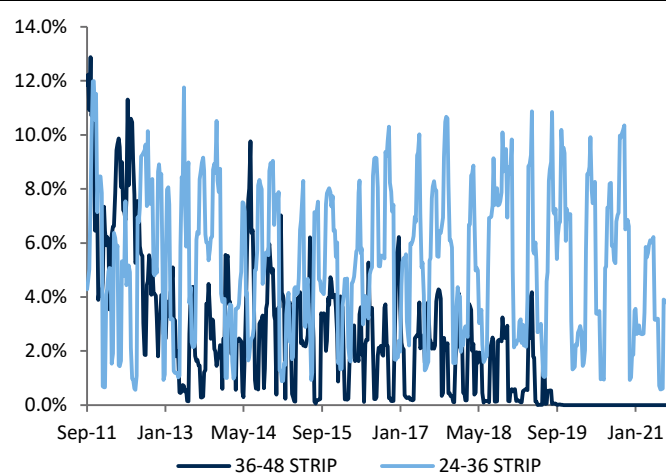
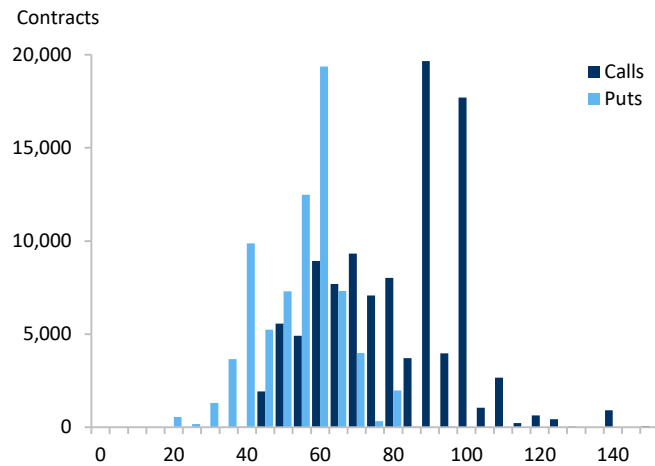


Figure 9 - Brent Strip Open Interest % by Contract Month



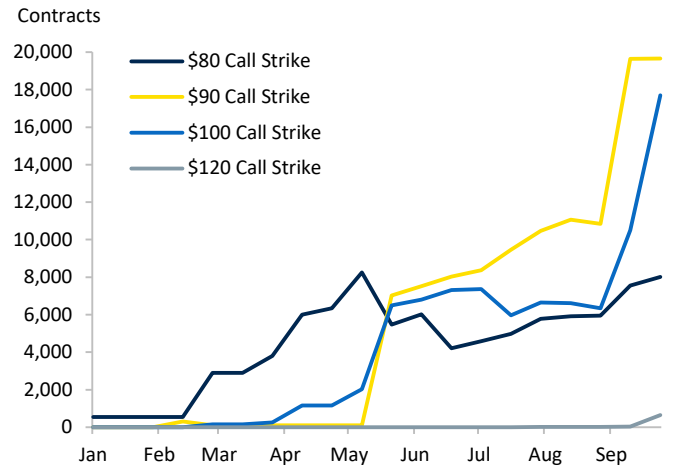
Source: RBC Capital Markets, Bloomberg

Figure 10 - WTI Jun'22 Open Interest



Source: RBC Capital Markets, Bloomberg

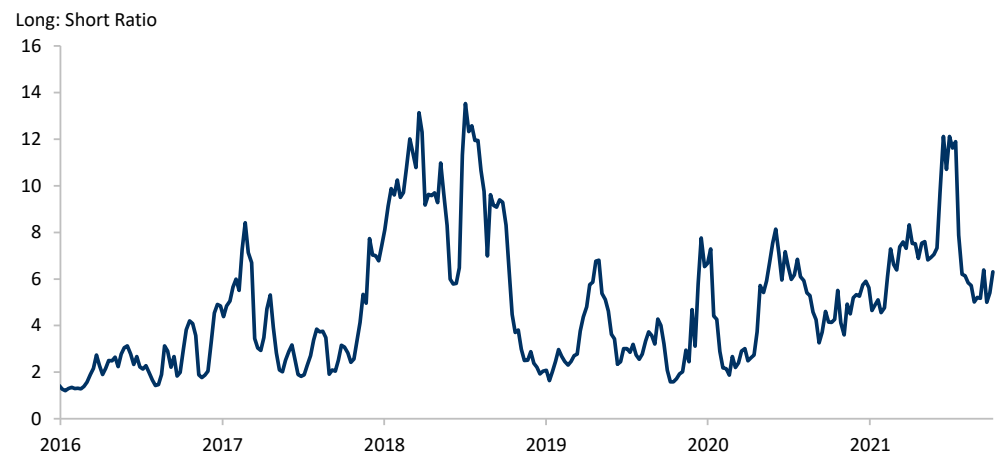
Figure 11 - WTI Jun'22 Open Interest Evolution



It is no secret that the universe of E&Ps is significantly underhedged relative to seasonally normal levels. Most street estimates have Cal'22 hedge ratios in the 15-20% range, while seasonally, producer hedge books typically clock in near 45-50% by this time of year. Naturally, the doubling of oil prices in the past 12 months has led producers to refrain from hedging away the upside. If this remains the case, the degree of perpetual selling pressure will remain muted relative to historical norms, leaving the term portion of the forward curve able to decompress higher and easier than during hyper-hedging periods witnessed in the past.

Term liquidity has become increasingly concentrated towards the front end of the curve, with open interest outside of 36 months evaporating over the last 10 years. The front 12-month strip for both Brent and WTI has taken a significantly larger amount of total open interest. Brent in particular has seen a more extreme move in liquidity, with the percentage of total open interest found in the first 12 months jumping from a ~70% average in 2012 to ~80% present day comparing YTD interest dispersion. Even when looking at the first 6 months, Brent open interest jumped from ~57% to 62% over the same period.

Figure 12 - CFTC WTI Managed Money Ratio of Investor Longs to Shorts



Source: RBC Capital Markets, CFTC

Investor Positioning & Lottery Tickets

Despite the recent rally in oil prices, financial market positioning among the investor community does not appear crowded (Figure 12). In fact, the ratio of WTI longs to shorts currently registers at 6.3:1, which is below both the summer highs of over 12:1 and the year to date average of 7.1:1.

What's meaningful is that short positioning remains minimal, suggesting that short covering rallies from current levels are unlikely. This means that fresh longs have to perpetuate the market in order for oil prices to move higher from current levels.

Options open interest is often another helpful gauge for assessing market sentiment. When assessing the Jun'22 WTI contract, higher strike call options at the \$90/bbl and \$100/bbl levels (along with \$60/bbl strike) occupy the largest open interest positions on the board (Figure 10).

Demand for deep out of the money call options for the \$150/bbl and \$200/bbl strike lines have increased of late (from clearly, very minimal levels). The \$150/bbl June WTI calls have more than quadrupled to 21¢ from 6¢ as recently as two weeks ago, while the \$200/bbl strikes are currently pricing at 6¢, up from the 1¢ to 2¢ range over recent weeks.

Figure 13 - Oil Price Forecasts, Period Averages

Price Forecast (\$/bbl)	2021					2022				
	Q1	Q2	Q3	Q4	'21 Avg	Q1	Q2	Q3	Q4	'22 Avg
WTI	\$58.25	\$63.25	\$70.50	\$77.00	\$67.25	\$80.75	\$77.00	\$79.50	\$86.75	\$81.00
Brent	\$61.25	\$69.00	\$73.25	\$80.25	\$71.00	\$84.00	\$80.00	\$82.25	\$89.25	\$84.00
WTI-Brent Spread	-\$3.00	-\$5.75	-\$2.75	-\$3.25	-\$3.75	-\$3.25	-\$3.00	-\$2.75	-\$2.50	-\$3.00

Source: RBC Capital Markets estimates

Figure 14 - Brent Price Scenarios - Bull, Bear, Base

Brent Price Scenarios (\$/bbl)	2021					2022				
	Q1	Q2	Q3	Q4	'21 Avg	Q1	Q2	Q3	Q4	'22 Avg
Bull Case (25%)				\$81.75	\$71.35	\$87.53	\$85.86	\$90.39	\$99.66	\$90.86
Base Case (60%)	\$61.32	\$69.08	\$73.23	\$80.28	\$71.03	\$83.88	\$80.06	\$82.34	\$89.30	\$83.91
Bear Case (15%)				\$77.20	\$70.21	\$76.24	\$67.82	\$63.22	\$62.97	\$67.56

Source: RBC Capital Markets estimates

Figure 15 - Global Supply and Demand Balance

Global Supply & Demand Balance mb/d	2021					2022				
	Q1	Q2	Q3	Q4	YoY	Q1	Q2	Q3	Q4	YoY
Demand										
OECD	42.0	43.6	45.4	45.7	2.3	44.7	44.3	47.3	47.6	1.8
Non-OECD	51.1	51.2	51.4	53.3	3.0	53.7	53.1	54.5	55.3	2.4
Total Demand	93.1	94.8	96.8	99.0	5.4	98.4	97.4	101.8	103.0	4.2
Supply										
OPEC Crude	24.8	25.9	26.9	27.6	0.3	28.3	28.9	29.6	29.6	2.8
OPEC Other Liquids	5.2	5.3	5.2	5.2	0.1	5.3	5.3	5.3	5.3	0.1
Non-OPEC Crude & Biofuels & Proc Gain	61.5	62.3	64.1	64.4	0.3	64.7	64.5	66.3	67.0	2.5
Total Supply	91.5	93.6	96.3	97.3	0.7	98.2	98.7	101.2	101.9	5.3
Stock Change	-1.5	-1.2	-0.6	-1.7		-0.2	1.3	-0.7	-1.0	
Call on OPEC	26.3	27.2	27.5	29.3		28.5	27.6	30.3	30.6	

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

Figure 16 - Global Oil Demand (kb/d)

Global Demand	2021				2022				YoY'21	YoY'22
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
US	18,686	20,207	20,681	20,417	20,324	20,599	21,168	21,150	1,491	812
Canada	2,124	2,098	2,433	2,428	2,127	2,036	2,632	2,570	79	70
Mexico	1,617	1,629	1,724	1,786	1,693	1,663	1,758	1,809	108	42
Total North America	22,427	23,934	24,838	24,631	24,143	24,298	25,558	25,528	1,678	924
OECD Europe										
Germany	1,878	2,025	2,240	2,232	1,943	2,055	2,358	2,308	-55	72
UK	1,156	1,249	1,327	1,389	1,220	1,265	1,402	1,465	65	58
Other Europe	8,869	9,324	9,958	9,658	8,951	9,345	10,692	9,995	381	293
Total OECD Europe	11,903	12,598	13,525	13,279	12,115	12,665	14,451	13,768	391	423
OECD APAC	7,667	7,040	7,041	7,787	8,471	7,322	7,323	8,329	243	477
Total OECD Demand	41,997	43,572	45,404	45,697	44,729	44,284	47,332	47,626	2,312	1,825
Non-OECD Demand										
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	YoY'21	YoY'22
South & Central America										
Argentina	583	595	614	606	598	596	632	615	65	11
Brazil	3,132	2,974	2,978	3,137	3,184	2,937	3,093	3,317	128	77
Other South & Central America	2,128	2,328	2,552	2,336	2,140	2,346	2,670	2,384	208	49
South & Central America	5,843	5,897	6,144	6,079	5,922	5,879	6,395	6,315	400	137
Middle East										
Iran	1,965	1,781	1,857	1,894	2,037	1,759	1,863	1,918	-3	20
Saudi Arabia	2,773	3,071	3,382	3,038	2,687	3,172	3,862	3,088	62	136
Other MidEast	2,960	2,971	3,194	2,980	2,996	2,924	3,342	2,972	184	32
Middle East	7,698	7,823	8,433	8,212	8,020	7,854	9,067	7,978	318	188
Emerging APAC										
China	14,567	15,198	14,850	15,155	15,441	16,110	15,741	16,064	1,145	897
India	5,096	4,556	4,576	5,056	5,493	4,911	4,933	5,450	286	376
Other	8,496	8,429	8,055	8,878	9,074	9,002	8,603	9,482	405	576
Emerging APAC	28,159	28,183	27,481	29,389	30,208	30,023	29,277	30,996	1,910	1,823
Africa	4,068	3,932	3,814	4,007	4,258	3,991	3,871	4,108	165	102
Non-OECD Europe	766	743	739	785	758	735	757	815	21	8
FSU	4,541	4,660	4,832	4,853	4,512	4,648	5,150	5,121	236	136
Total Non-OECD Demand	51,075	51,238	51,443	53,325	53,678	53,130	54,517	55,334	3,049	2,394
Global Demand	93,072	94,810	96,847	99,022	98,407	97,414	101,848	102,959	5,361	4,219

Source: RBC Capital Markets estimates, IEA, EIA, JODI, company and government sources

Figure 17 - Global Oil Supply (kb/d)

Non- OPEC Supply	2021				2022				YoY'21	YoY'22
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
US	15,574	15,992	16,801	16,765	16,844	16,826	17,813	17,971	-276	1,081
Canada	5,689	5,424	5,627	5,824	5,905	5,691	5,817	5,903	292	188
Mexico	1,930	1,961	1,905	1,968	1,975	1,998	2,007	2,014	9	58
Total North America	23,193	23,377	24,333	24,557	24,724	24,515	25,637	25,888	25	1,326
Brazil	2,949	3,035	3,117	3,149	3,177	3,230	3,278	3,317	19	188
Other South & Central America	2,325	2,276	2,340	2,337	2,315	2,326	2,356	2,379	39	25
Non-OPEC S & C America	5,274	5,311	5,457	5,486	5,492	5,556	5,634	5,696	57	213
Norway	2,106	1,895	1,976	2,179	2,211	2,085	2,041	2,210	38	98
Other OECD Europe	1,481	1,194	1,326	1,413	1,414	1,360	1,331	1,359	-206	13
Total OECD Europe	3,587	3,089	3,302	3,592	3,625	3,445	3,372	3,569	-168	110
Azerbaijan	696	692	704	720	723	726	729	732	4	25
Kazakhstan	1,843	1,844	1,719	1,782	1,807	1,831	1,862	1,862	-40	44
Russia	10,525	10,802	10,853	10,933	11,201	11,320	11,452	11,563	169	606
Other FSU	254	253	356	260	263	288	371	468	-2	67
Total FSU	13,318	13,591	13,632	13,695	13,994	14,165	14,414	14,625	132	741
Non-OPEC Africa	1,319	1,346	1,290	1,292	1,290	1,276	1,263	1,252	-69	-42
Non-OPEC Mideast	3,101	3,115	3,151	3,197	3,257	3,282	3,305	3,308	78	147
China	4,056	4,089	4,067	4,072	4,080	4,083	4,069	4,061	101	2
India	739	724	730	724	725	714	704	694	-21	-20
Other Non-OPEC Asia Pacific	2,689	2,565	2,545	2,603	2,570	2,550	2,528	2,509	-156	-61
Total Non-OPEC APAC	7,484	7,378	7,342	7,399	7,375	7,347	7,301	7,264	-76	-79
Processing Gains	2,127	2,223	2,339	2,324	2,378	2,378	2,378	2,378	140	125
Global Biofuels	2,140	2,908	3,258	2,895	2,517	2,555	2,951	3,031	218	-37
Total Non-OPEC Supply	61,543	62,338	64,104	64,437	64,652	64,519	66,255	67,011	337	2,504
Global Supply	91,534	93,565	96,281	97,299	98,176	98,694	101,176	101,918	742	5,321
OPEC Supply	2021				2022				YoY'21	YoY'22
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Algeria	906	945	935	964	993	1,022	1,051	1,051	26	91
Angola	1,151	1,135	1,140	1,181	1,223	1,265	1,307	1,307	-140	124
Congo	285	268	267	276	285	294	303	303	-33	22
Equatorial Guinea	91	108	84	87	91	94	98	98	-23	3
Gabon	193	203	195	201	206	211	216	216	-7	14
Iran	2,407	2,374	2,249	2,343	2,322	2,305	2,323	2,317	404	-26
Iraq	3,957	3,965	4,112	4,239	4,366	4,494	4,621	4,621	-13	458
Kuwait*	2,402	2,426	2,455	2,414	2,490	2,567	2,644	2,644	-47	162
Libya	1,179	1,171	1,152	1,167	1,164	1,161	1,164	1,163	796	-4
Nigeria	1,329	1,366	1,208	1,301	1,292	1,267	1,287	1,282	-234	-19
Saudi Arabia*	8,581	8,548	9,635	9,817	10,118	10,419	10,720	10,720	-57	1,349
UAE	2,731	2,841	2,946	3,032	3,119	3,206	3,293	3,293	-81	340
Venezuela	598	599	569	589	586	581	585	584	0	-5
OPEC Crude Total	24,808	25,947	26,948	27,612	28,255	28,886	29,611	29,598	341	2,759
OPEC Other Liquids	5,183	5,280	5,230	5,250	5,269	5,288	5,310	5,310	64	59
* Includes Neutral Zone										

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