

Oil

Gaining momentum, with US in the driver's seat

- With evidence of oil's demand rebound and limited apparent progress in negotiations with Iran, oil has resumed its rally as we expected, with Brent now trading at its highest level since May 2019. We forecast this rally to continue with Brent expected to reach \$80/bbl this summer, driven by a further large vaccine-driven increase in demand, including jet, in the face of mostly inelastic supply.
- We believe that the recent narrowing of the WTI-Brent price spread through our \$2.5/bbl forecast is noteworthy, with North America taking the mantle from Chinese demand or OPEC cuts and disruptions in tightening the global oil market. Local demand is rebounding sharply while shale producers remain disciplined, with the US and Canada set to deliver this summer a net reduction in crude exports to the global market larger than Saudi's unilateral cut earlier this year.
- While there exists both OPEC upstream and refinery downstream excess capacity, we expect OPEC+ to fall behind the demand rebound - especially given shale's lower price elasticity - with refiners instead likely to respond quickly to rising demand. As a result, we continue to expect a faster rebalancing of the crude relative to petroleum product markets, reflected in our trade recommendations: long Brent flat price, Brent timespreads and short Brent puts vs. long 3Q EU gasoil.

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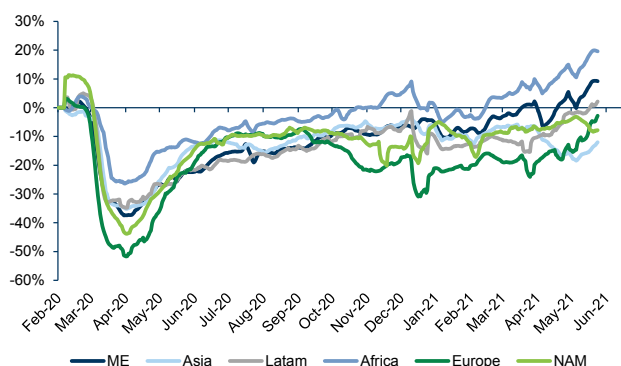
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- On the demand side, rising vaccination rates are leading to higher mobility in the US and Europe, with global demand estimated up 1.5 mb/d in the last month to 96.5 mb/d. We forecast this recovery to continue, with global demand expected to reach 99 mb/d in August, with jet demand set to ramp-up this summer as we discuss in our latest deep dive. In fact, DM mobility seasonality and Middle East cooling demand will further contribute to the rebound in demand, leaving only a modest recovery in EM exc. China demand needed to reach our forecast (with Indian mobility already inflecting higher).

Exhibit 1: The reopening of economies is clear in high-frequency mobility data

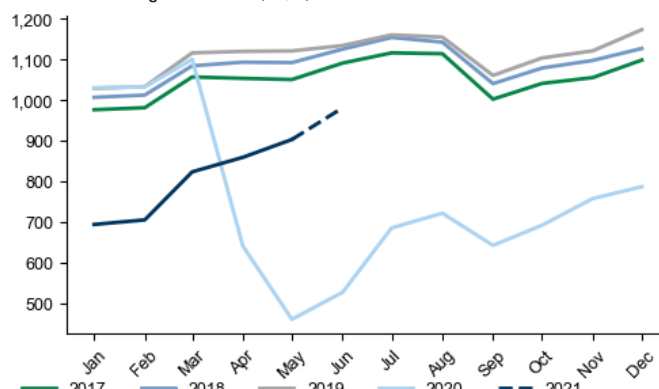
Passenger vehicle demand vs. seasonal norms



Source: Google LLC "Google COVID-19 Community Mobility Reports";
<https://www.google.com/covid19/mobility/> Accessed: June 9, 2021, Apple, IEA, JODI, Goldman Sachs Global Investment Research

Exhibit 2: US domestic travel is growing due to pent up demand as restrictions are lifted

US domestic flight demand (kb/d)

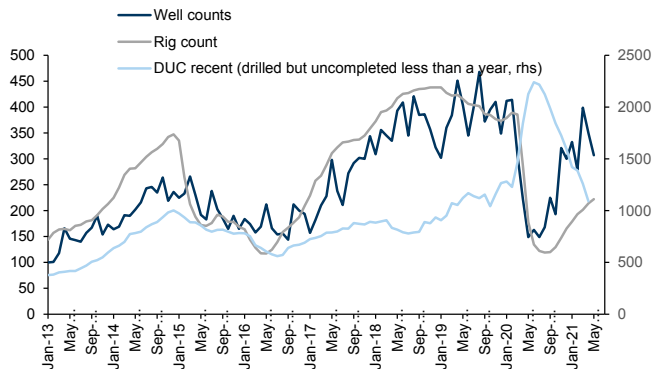


Source: OAG, Goldman Sachs Global Investment Research

- On the supply side, recent headlines comfort us in our expectation that a potential recovery in Iran exports won't happen till the fall, with today's lift of sanctions aimed at helping stalled negotiations. Shale producers further remain disciplined, with an only slow increase in drilling activity. Finally, OPEC+ remains cautious in bringing new production, in fact slightly falling behind its May targeted hike. This has left the oil market in a widening 2.2 mb/d deficit currently, with physical crude oil prices and timespreads corroborating this tightening.

Exhibit 3: US shale producers continue to display restraint: rigs are only slowly brought back with production held up by drawing down the excess well backlog instead

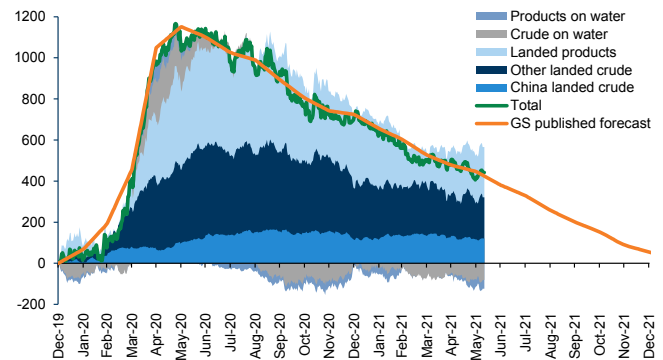
Permian horizontal oil rig count (lhs), oil well completion (lhs) and well backlog(rhs)



Source: Enverus, Company data, Goldman Sachs Global Investment Research, Kayros

Exhibit 4: The pace of global inventory draws is accelerating

Change in global oil stocks since 31-Dec-19 (mb)

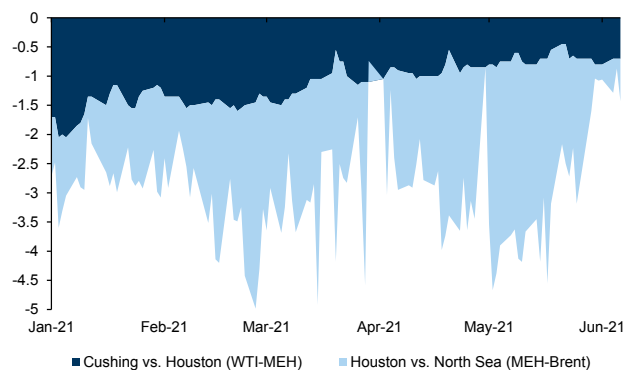


Source: IEA, EIA, Kpler, JODI, National Sources, Goldman Sachs Global Investment Research

- We believe that the recent narrowing of the WTI-Brent price spread through our \$2.5/bbl forecast is noteworthy, with North America taking the mantle from Chinese demand or OPEC cuts and disruptions in tightening the global oil market. From May through 3Q, we expect US and Canada demand to increase by 0.7 mb/d more than local supply (deseasonalized). Given our runs expectations, this will deliver an even larger net reduction in crude net exports of 1.4 mb/d (deseasonalized) to the global market, even greater than Saudi's unilateral cut earlier this year. As such, we view WTI returning to its pre-shale role as a leading indicator of the upcoming tightness in the Atlantic basin and ultimately global oil market, at least in 2021.

Exhibit 5: The tightening of the North American crude market is reflected in tightening crude differentials...

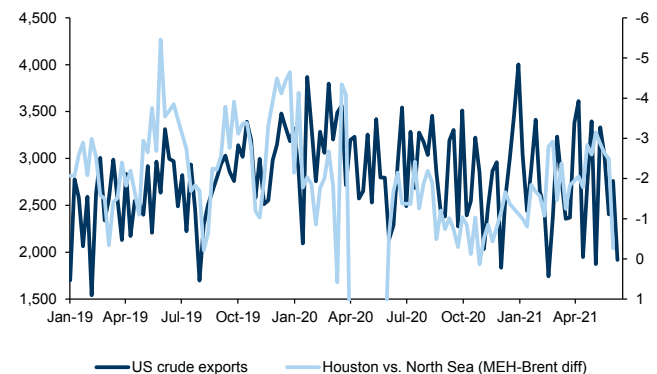
WTI-Brent price spread decomposition (\$/bbl)



Source: Platts, Goldman Sachs Global Investment Research

Exhibit 6: ... which will drive a tightening of the global oil market through lower US crude exports

US crude exports (weekly, kb/d, lhs) vs. MEH-Brent differential (\$/bbl, rhs)



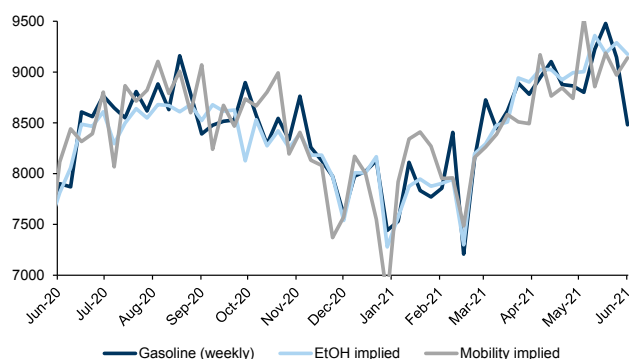
Source: Platts, Kpler, Goldman Sachs Global Investment Research

- Importantly, we believe that the latest disappointing EIA implied US demand weekly data, which paused the recent rally, are not a red flag but rather distorted by the usual post Memorial day seasonality and volatile gasoline exports (consistent with our own modeling). With total oil net speculative positioning still 23% and 34% off its March 2021 and May 2019 highs, respectively, we therefore see both catalysts

and dry powder for Brent to rally to \$80/bbl.

Exhibit 7: Our measures of US driving point to stronger demand than last week's disappointing EIA weekly data

Ethanol and Google Mobility implied gasoline demand vs. EIA weekly implied demand (kb/d)

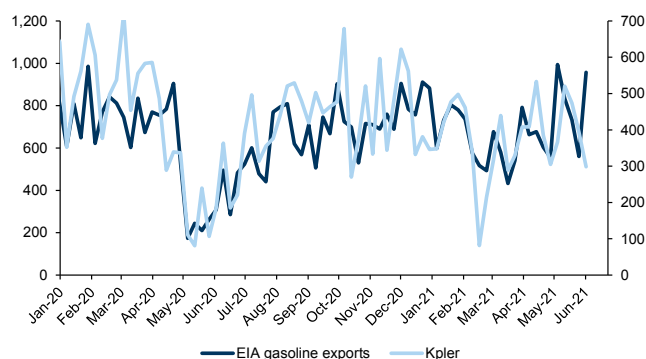


Google LLC "Google COVID-19 Community Mobility Reports":
<https://www.google.com/covid19/mobility/> Accessed: June 9, 2021

Source: EIA, Google COVID-19 Community Mobility Reports, Goldman Sachs Global Investment Research

Exhibit 8: The increase in gasoline exports also looks surprisingly large - further weighing on the EIA's estimate of demand

EIA vs. Kpler weekly gasoline exports (kb/d)

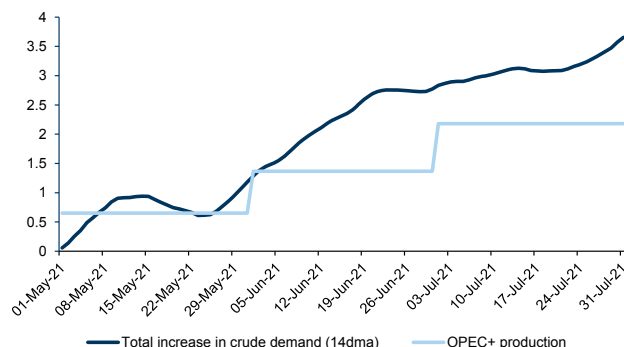


Source: EIA, Kpler

- Justifying this forecast, we model that inventory draws will lead to steeper backwardation, with the front-month to 3-year forward Brent timespread expected to reach \$15/bbl vs. \$10.5/bbl currently. Second, we expect the gradual return of consumer hedging to push long-dated prices higher back to marginal costs. As ESG and environmental regulations drive costs of capital and required rates of returns higher, we expect it will take a return of 3-year forward Brent prices - reflective of marginal costs - to \$65/bbl vs. \$62/bbl currently. We expect such a level will incentivize higher brownfield and shale activity, both needed to end the stock draws in 2022 once OPEC+ spare capacity has normalized.
- We continue to expect a faster rebalancing of the crude relative to petroleum product markets. While there exists both OPEC+ upstream and refinery downstream excess capacity, we expect OPEC+ to fall behind the demand rebound - given shale's lower price elasticity - with refiners instead likely to respond quickly to rising demand. This is visible in the recent relative weakness in petroleum product timespreads and basis relative to crude.

Exhibit 9: Crude markets will turn to a large deficit in mid-June despite OPEC+ ramping up exports

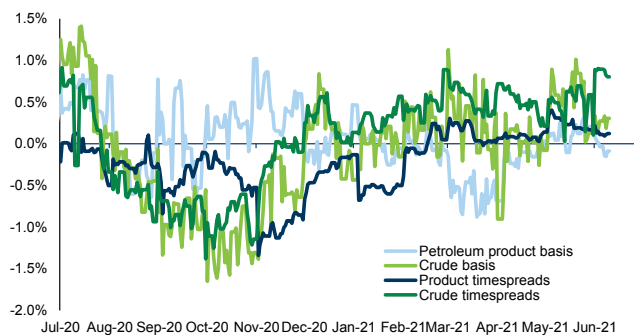
Increase in crude demand from higher refinery runs and seasonal cooling demand in Middle East vs. OPEC+ production (mb/d)



Source: IIR, JODI, Goldman Sachs Global Investment Research

Exhibit 10: Global physical price indicators have strengthened since April, especially for crude

Physical basis and prompt timespreads weighted by geography and demand shares



Source: Platts, ICE, CME, DME, Goldman Sachs Global Investment Research

- This is reflected in our current trade recommendations, biased to being long crude: long Dec-21 Brent futures, long Dec-21 vs. Dec-22 Brent timespreads and short Dec-22 Brent puts vs. long 3Q EU gasoil cracks (still very depressed). In particular, we estimate that jet regrade already prices in our expected jet recovery, with the ramp-up in US Gulf Coast runs set to support gasoline yields. We see scope for North America onshore crude differentials to tighten further - as pipelines compete to attract barrels - although higher freight rates as OPEC+ seaborne exports recover lead us to prefer expressing a WTI-Brent view through equities, with our US energy analysts Sell rated on the Mid-Continent refining complex. Finally, we recommend consumers restart hedging forward price exposure while producers wait to add to hedges.

North American Oil Balance

Exhibit 11: North American oil supply-demand balance

kb/d

	Demand			Supply			Net NAM	Runs			Net	
	Canada	US	NAM	Canada	US	NAM		Canada	US	NAM	Crude	Products
Jan-19	2,153	20,917	23,070	5,477	16,509	21,986	-1,084	1,163	16,783	17,946	4,040	-5,124
Feb-19	2,210	20,596	22,806	5,461	16,482	21,943	-863	1,147	15,846	16,993	4,950	-5,813
Mar-19	2,093	20,584	22,677	5,539	16,756	22,295	-382	1,152	15,935	17,087	5,208	-5,590
Apr-19	2,183	20,574	22,757	5,618	17,026	22,644	-113	999	16,341	17,340	5,304	-5,417
May-19	2,212	20,726	22,938	5,381	17,101	22,482	-456	1,120	16,719	17,839	4,643	-5,099
Jun-19	2,408	20,971	23,379	5,535	16,973	22,508	-871	1,206	17,236	18,442	4,066	-4,937
Jul-19	2,464	21,040	23,504	5,562	16,627	22,189	-1,315	1,275	17,175	18,450	3,739	-5,054
Aug-19	2,697	21,499	24,196	5,603	17,289	22,892	-1,304	1,301	17,297	18,598	4,294	-5,598
Sep-19	2,543	20,534	23,077	5,356	17,577	22,933	-144	1,201	16,403	17,604	5,329	-5,473
Oct-19	2,494	21,106	23,600	5,468	17,785	23,253	-347	1,150	15,681	16,831	6,422	-6,769
Nov-19	2,453	21,073	23,526	5,695	17,934	23,629	103	1,189	16,482	17,671	5,958	-5,855
Dec-19	2,512	20,705	23,217	5,833	17,874	23,707	490	1,299	16,793	18,092	5,615	-5,125
Jan-20	2,298	20,209	22,507	5,649	17,983	23,632	1,125	1,245	16,231	17,476	6,231	-5,031
Feb-20	2,502	20,144	22,646	5,778	18,856	24,634	1,988	1,220	15,867	17,087	7,547	-5,559
Mar-20	2,193	18,654	20,847	5,671	19,038	24,709	3,862	1,042	15,226	16,268	8,441	-4,579
Apr-20	1,660	14,865	16,525	5,049	17,602	22,651	6,126	924	12,786	13,710	8,941	-2,816
May-20	1,882	16,371	18,253	4,763	15,529	20,292	2,039	940	12,958	13,898	6,394	-4,354
Jun-20	2,083	17,703	19,786	5,087	16,612	21,699	1,913	837	13,732	14,569	7,130	-5,217
Jul-20	2,105	18,593	20,698	5,018	17,375	22,393	1,695	1,038	14,338	15,376	7,017	-5,321
Aug-20	2,230	18,733	20,963	4,869	16,926	21,795	832	970	14,151	15,121	6,674	-5,842
Sep-20	2,146	18,563	20,709	5,002	17,217	22,219	1,510	1,151	13,573	14,724	7,495	-5,985
Oct-20	1,972	18,926	20,898	5,309	16,793	22,102	1,204	1,120	13,445	14,565	7,537	-6,333
Nov-20	2,168	18,978	21,146	5,670	17,582	23,252	2,106	1,212	14,124	15,336	7,916	-5,810
Dec-20	2,004	19,014	21,018	5,850	17,216	23,066	2,048	1,151	14,140	15,291	7,775	-5,727
Jan-21	1,913	18,867	20,780	5,818	17,259	23,077	2,297	1,155	14,525	15,680	7,397	-5,100
Feb-21	2,002	17,712	19,714	5,609	14,901	20,510	796	1,260	12,374	13,634	6,876	-6,080
Mar-21	2,075	19,592	21,667	5,678	17,356	23,034	1,367	1,277	14,383	15,660	7,374	-6,007
Apr-21	2,056	19,791	21,847	5,150	17,421	22,571	724	1,096	15,021	16,117	6,454	-5,730
May-21	2,165	19,895	22,061	5,250	17,551	22,801	741	980	15,309	16,289	6,513	-5,772
Jun-21	2,260	20,346	22,606	5,210	17,499	22,709	103	1,269	16,291	17,559	5,149	-5,046
Jul-21	2,337	20,367	22,704	5,547	17,497	23,044	340	1,361	16,401	17,762	5,282	-4,942
Aug-21	2,441	20,796	23,238	5,511	17,476	22,987	-250	1,381	16,468	17,849	5,139	-5,389
Sep-21	2,404	20,067	22,471	5,398	17,589	22,987	516	1,291	15,541	16,832	6,155	-5,639
Oct-21	2,391	20,468	22,859	5,542	17,577	23,119	259	1,135	15,368	16,503	6,616	-6,357
Nov-21	2,385	20,461	22,846	5,810	17,866	23,675	829	1,301	16,411	17,711	5,964	-5,135
Dec-21	2,344	20,430	22,773	5,845	18,012	23,857	1,084	1,361	16,441	17,802	6,056	-4,972
May vs. 3Q	Demand			Supply			Net NAM	Runs			Net	
	Canada	US	NAM	Canada	US	NAM		Canada	US	NAM	Crude	Products
2021	229	515	744	235	-31	205	-539	364	828	1,192	-987	448
2015-19	177	342	520	499	180	679	159	145	84	228	451	-291
Delta	51	173	224	-263	-211	-475	-698	220	744	964	-1,438	740

Source: EIA, IEA, Kpler, OAG, Goldman Sachs Global Investment Research

Disclosure Appendix

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