Corona Crude Contango

Expect rapid inventory build.

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Data Sources for This Publication
EIA
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To discover more about the data sources used, click here.

Double Punch

The oil market selloff that accelerated on Monday March 9 has seen prompt futures prices for CME Nymex West Texas Intermediate crude delivered to Cushing, Oklahoma drop 41% in just over three weeks to settle at $31.73/barrel on Friday, March 13. The double punch of demand destruction courtesy of coronavirus and a supply flood from warring NOPEC partners Saudi Arabia and Russia has shocked crude values sharply lower. Two resulting market dynamics have reversed prospects for U.S. crude exports and threaten congestion at the Gulf Coast. This note describes the changing market.

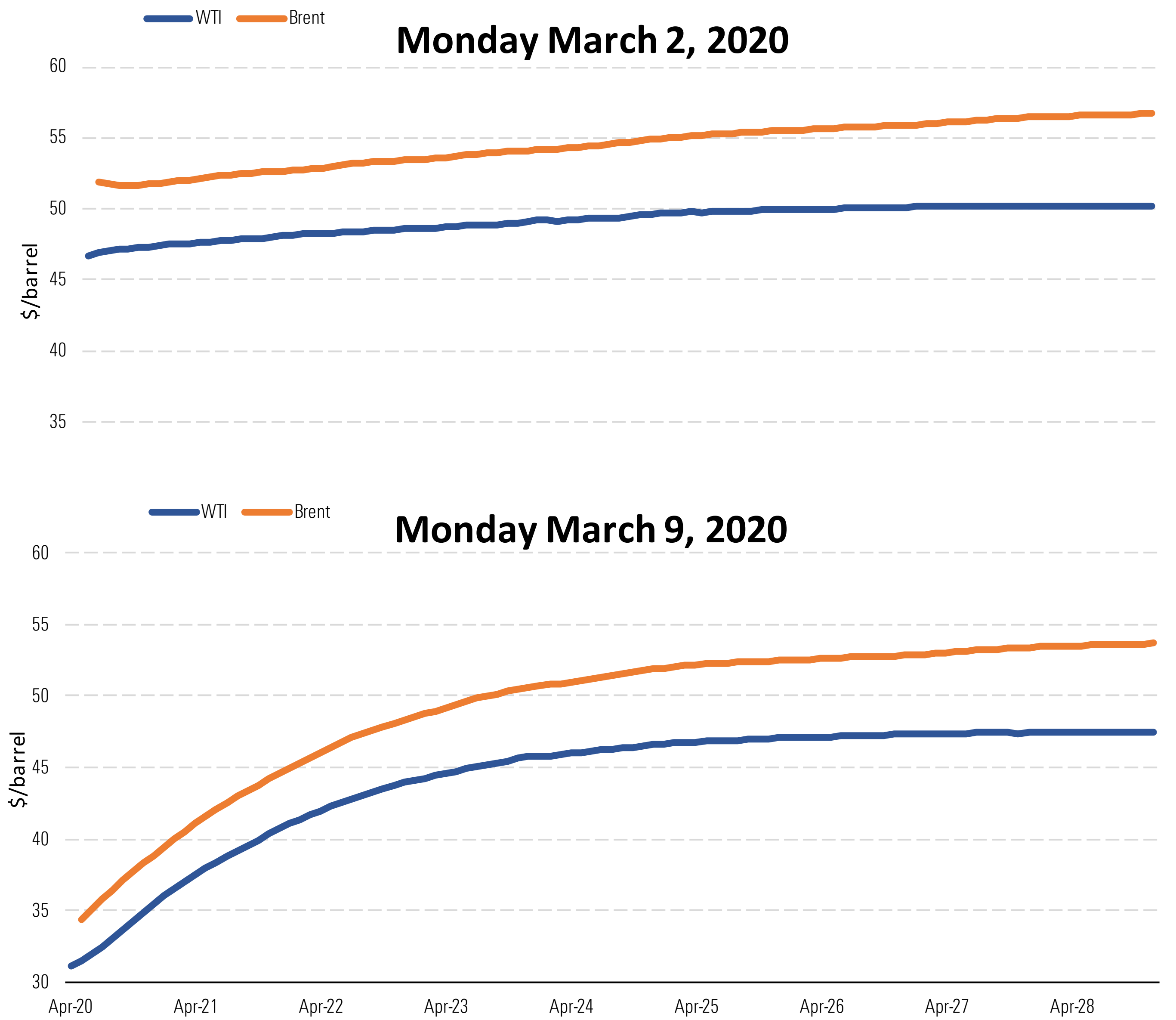
Behind the oil price rout is the combination of two market fundamentals not usually seen in tandem. The first is demand destruction due to coronavirus and the second a sudden increase in supply. With worldwide disruption to normal economic activity and a drastic reduction in local, national and international travel, demand for transportation fuel has cratered. Although this reduction in demand is sudden and unexpected it would normally encourage oil producers to cut supplies to balance the market and keep prices stable.

Instead OPEC and its OPEC Plus partner Russia chose this moment to abandon the supply discipline they have successfully maintained since January 2017. Adding insult to injury they opened the taps and launched a battle for market share with the Saudi's promising to raise production to 12.3 million barrels/day in April and Russia following suit with a pledge to raise output by 500 thousand barrels/day to 11.8 mmb/d. With U.S. production reaching a record 13.1 mmb/d in February according to the Energy Information Administration and likely taking months to slow down even if producers halt drilling, the world market will quickly be awash in crude.

Into Contango

Regardless of cause, an oversupplied market puts buyers in the driving seat with competing sellers discounting spot prices to clear their crude. Because of the pressure on nearby prices, further out transactions for future delivery achieve higher prices – a market structure known as contango. Exhibit 1 shows how rapidly forward price curves for WTI (blue line) and international equivalent benchmark Brent (orange line) flipped from a flat shape on Monday March 2 to a deep contango a week later March 9.

Exhibit 1 WTI and Brent Forward Curves



Source: CME Group, Morningstar commodities.

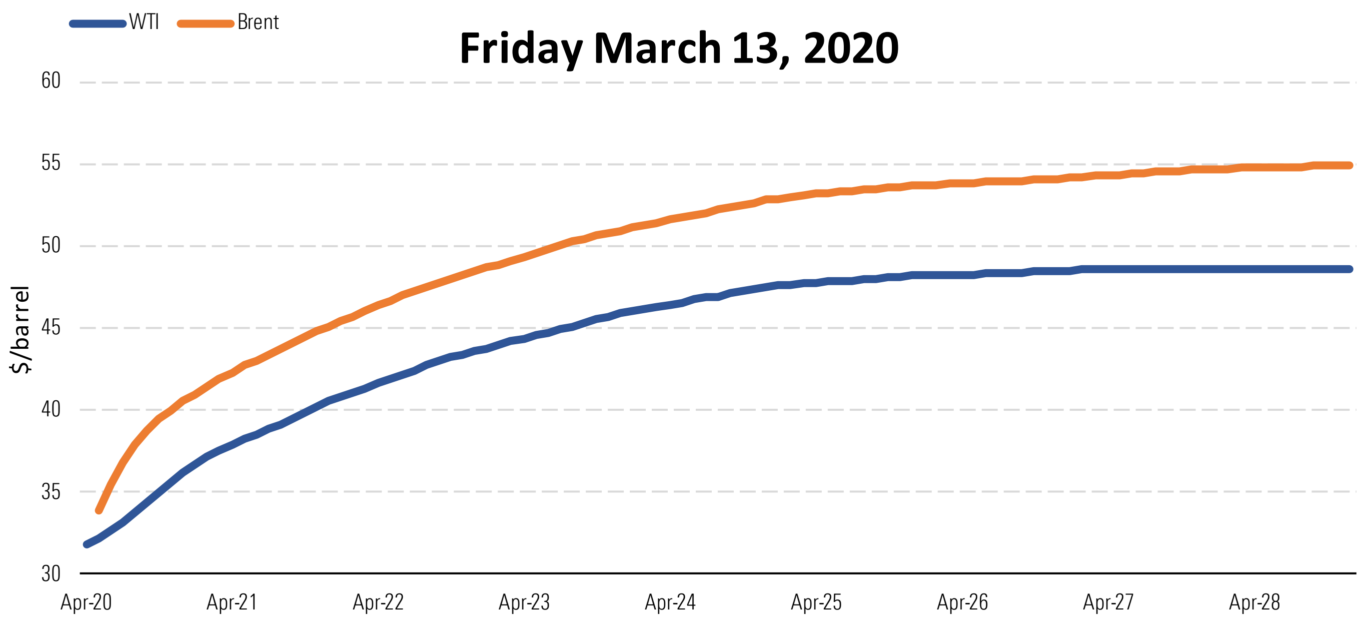
Contango Deepens

The March 9 price crash was prompted by the announcement the day before that Saudi Arabia would heavily discount its crude to buyers in Europe and Asia – starting a price war with former NOPEC partner Russia. During the days following Monday's price rout, Russia and Saudi State oil company Aramco indicated they would increase output and similar supply hikes were promised by Kuwait and other OPEC members, deepening the contango structure.

Exhibit 2 shows the forward curve shape for Friday, March 13th. The front of the curves steepened between March 9th and 13th with Brent deliveries in Dec 2020 valued $6.63/barrel higher than prompt

May 2020 and WTI Dec 2020 valued $4.43/barrel above prompt Apr 2020. At $6.63/barrel, the 7-month Brent 2020 contango on March 13th easily covered typical storage costs of $0.50/barrel per month or $3.50/barrel. The WTI equivalent was $4.43/barrel – representing a potential $0.93/barrel profit for traders buying physical WTI today, selling Dec 2020 futures and storing the crude until December for $3.50/barrel. This market structure creates opportunity for traders to put on similar contango trades as long as they have access to storage. These contango plays can be onshore at trading hubs like Cushing, OK or offshore on very large crude carriers chartered for long voyages to Asia, that discharge several months after loading.

Exhibit 2 Brent and WTI Curves



Source: CME Group, Morningstar commodities.

Rising Inventory

With the contango market structure encouraging crude storage and demand sharply lower because of the coronavirus, inventory levels across the globe will increase rapidly. The latest EIA monthly Short-Term Energy Outlook, released March 10th, forecasts a gap of about 1.5 mmb/d between worldwide supply and demand of crude and condensate in the first quarter of 2020, rising to 2.0 mmb/d in the second quarter. That gap implies an inventory build of 272 million barrels in the first half of 2020, but is based on a conservative estimate of demand destruction that other analysts have forecast to be as much as 5 mmb/d.

Brent Premium Crushed

Alongside contango, another market force was at work last week in the shape of rapid contraction in the price premium for Brent over WTI. On March 2nd before prices tanked, Brent prompt futures were priced at $4.98/barrel above the equivalent WTI contract. On March 9th that Brent premium dropped to $2.89/barrel and on March 13th it settled at $1.74/barrel. This narrowing premium reflected strong competition for Brent from Saudi and Russian barrels in international markets pushing down its value relative to WTI.

This narrowing Brent premium makes WTI less competitive in international markets. As we've previously detailed (see our Aug 2019 note: Is the Second Shale Crude Boom Ending?) the expansion of U.S. crude exports is underpinned by WTI being discounted in the world market against competitors – particularly Brent. Generally, the wider Brent's premium over WTI the higher export volumes. That's because a wide premium covers transport costs for U.S. crude to markets in Asia and Europe, making the latter attractive to buyers. Last week that premium collapsed to $1.74/barrel on Friday – barely covering pipeline shipping costs for WTI from Cushing to the Gulf Coast, let alone the freight cost to overseas markets. In effect the narrow Brent premium traps WTI in the U.S. market.

Sellers Seek Shelter

In the short term, with spot prices at steep discounts and overseas markets shut off by a narrow Brent premium, storage has become the only viable option for crude reaching the Gulf Coast without a domestic refinery buyer.

Implications

There are several implications of a contango structure and narrow Brent premium as follows:

- Reduced crude exports from the Gulf Coast starting in April as surplus Saudi barrels flood the international market and after previously arranged U.S. shipments clear the docks.
- U.S. crude inventories will build in all regions as refiners reduce throughput causing higher stock levels at the Gulf Coast due to stranded export barrels.
- An increase in tanker freight rates - already underway in the Mideast due to Saudi charter activity – will spread to all markets as speculators secure large vessels for floating contango plays
- As commercial storage at the Gulf Coast fills up, downward pressure on nearby prices increases as sellers discount stranded barrels
- Product inventories increase as demand wanes, putting downward pressure on prices at the consumer level
- U.S. producers have already responded by slashing drilling budgets, but this takes time to translate to lower output. Shutting in existing wells is complex and uneconomic.
- Producer stock values have cratered as cash flow expectations shrink. Bankruptcy, mergers and acquisitions will follow
- Midstream companies with pipeline or terminal projects underway need to double check the creditworthiness of committed shippers before proceeding with construction

- Expect proposed infrastructure projects to slow down even when final investment decisions have been made.

We will monitor these impacts in the months to come as the corona crude contango plays out.

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