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Brent crude: Spot realities vs futures pricing

Nishanth Gopalakrishnan
bl_research bureau

Two friends get into a discussion about the crude realities of oil pricing

Praveen: While reading the news a few days ago, I came to know that the Dated Brent price touched an all-time high of \$145 a barrel. It felt odd. As I've been tracking oil price since the US-Iran war began, I knew very well that crude was trading just under \$100. I checked on Google to make sure, and crude was trading at only \$96 a barrel. What is this 'Dated Brent' and why is its price different?

Naveen: What you checked on Google is the futures price of Brent crude and what was reported in the news is the price of Dated Brent, which represents the actual price refiners are paying for oil in the physical world — also known as spot market price. This Dated Brent price is also the primary global benchmark for physical oil trades.

Brent as you would know is a grade of light crude oil extracted in the North Sea that is easy to refine, but, would you like to know why it's called 'Dated'?

Praveen: Yes, I'm all ears.
Naveen: You see, crude is transported by oil tankers around the world, and is loaded on to them at a place called the 'loading terminal'.

Based on availability, the terminal operator would give a 3-day loading window/slot to the oil producer.

During these days, the oil buyer has to send a ship to collect the oil. This dating process is by which it came to be known as 'Dated Brent'. There is one more nuance I would like you to know. Today, Dated Brent is at \$113. What this represents is the price of oil that will be loaded on to a tanker (at a terminal) 10-30 days from today, and from there delivered at a later date at the buyer's location. It is not the price of oil being delivered today.

Praveen: Why is it so?

Naveen: Once the seller notifies the loading window dates to the buyer, the buyer will certainly need some time to charter a vessel, arrange insurance and so on. This 10-30-day time-gap is to let the buyer arrange these.

Praveen: I see. Now tell me how I can check this Dated Brent price.

Naveen: Unlike Brent futures which are traded on exchanges, Dated Brent is not, and is instead an assessment made



by agencies such as Platts (S&P) and Argus Media.

These are not available freely in public sites unless reported in the media.

Praveen: Why was Dated Brent at \$145, when futures were trading at \$96?

Naveen: Here some nuances must be understood — that's actually the price of June ICE (Intercontinental Exchange) Brent futures in early April. These futures, are just paper trades settled in cash and entail no physical delivery of crude (unless coupled with EFP-discussed here). These primarily serve as a tool for price discovery and are used for hedging and speculation alike. June futures were at least 70-80 days out in the future, while Dated Brent captured prices of crude that would be loaded on to tankers in the next 10-30 days and thereby, those transactions close by mid-May latest.

With a lower price than the spot market benchmark, the futures market expected the acute oil deficit to ease substantially by June. That's the interpretation for the difference that you asked.

Praveen: Interesting. But this is my understanding of futures. Futures are basically derivatives deriving their value from the underlying. Crude is the underlying here. Shouldn't they move in tandem with the physical market? Won't such a large gap between futures and

spot price give rise to massive arbitrages?

Naveen: Futures eventually have to converge with physical prices and there are three ways this could happen.

But before that, bear with me as I take you on a little detour to the forward market. While the futures market is meant for financial or mere cash-settled trades, the forward market is meant for traders who want to take/give physical delivery of crude. Here, the 25-day BFOET forward market happens to be the benchmark and a reference for Dated Brent prices as well. BFOET refers to North Sea crude grades namely, Brent, Forties, Oseberg, Ekofisk and Troll. The '25-day' period refers to a mandatory 25-day notice a seller of the forward has to give the buyer before the first day of the 3-day loading window. Again, this is to let the buyer arrange logistics.

The front month forward contract as of today, is the June forward. June, here, refers to the delivery month or the month in which crude will be loaded on to a tanker.

However, trading for June forward expires by the end of April itself! This is so structured to accommodate the 25-day notice period, even for contracts struck in the end of April. May will serve as the gap month for the June forward.

When April ends and rolls over to May, the delivery month also rolls a month forward to

July — meaning, for contracts traded in May, deliveries will happen in July, so on and so forth.

With me so far?

Praveen: Oh yeah. Now tell me how the convergence happens between futures and spot price, in the three ways you mentioned.

Naveen: The first is through an exchange settlement mechanism. In case of futures traders on ICE who hold their positions open until expiry, the exchange will publish the ICE Brent Index on the business day following the expiry day and this is the price such traders have to use to square off their positions. For instance, in case of June futures, the expiry day will fall on April 30, and ICE Brent index value will be published on May 1.

Praveen: Got it. So, how does this index help futures and spot prices converge?

Naveen: The answer lies in the index's methodology. It's a bit complex but you can understand that the index largely derives its value from the forward market, I told you about.

For example, ICE Brent index for June futures (April expiry) will largely derive its value from the prices of June forward contracts. As we near April-end, the prevailing Dated Brent and forward prices will have a bearing on this index. The index, thus deriving its value, aids the futures market converge with the spot market.

Look at it this way. There is a

futures market which involves financial speculators. There is a physical market that involves taking delivery, reflecting real demand and supply. These tend to converge as we near expiry.

Praveen: Understood. What are the other two ways?

Naveen: The second way addresses your question about arbitrages. When traders spot large differences between the futures and physical forward market prices, they buy the undervalued futures and simultaneously sell a forward (which trade higher) in the physical market. Now, there is a derivative instrument called EFP (exchange for physical) which lets a futures trader swap his paper long futures position for a physical long forward contract, but at a swap cost. The trader can then square the long and short physical forward positions and pocket the gain (cash settled in general, as these are essentially arbitrage trades). However, when arbitrage windows emerge, traders flock to buy futures in large quantities — thus taking futures price closer to that of physical forwards.

The third way involves a short squeeze.

Traders holding short positions in the futures market face risk of losses if the physical market disconnects to the upside, making no sense to hold on till expiry. When a large population of such traders buy futures to cover their shorts, it triggers a short squeeze, pushing futures price closer to physical market price.

Praveen: I see. You mentioned Dated Brent is at \$113 today, having fallen from \$145 a couple weeks ago. What explains this?

Naveen: A reason why this could be so is that since the ceasefire was announced, military attacks have largely stopped and that could've helped spot prices cool. However, the ongoing blockade, production shut-ins in West Asian countries and depletion of high sea inventory haven't yet eased the flow of crude. Despite this, spot prices have fallen. There could be one possible explanation — demand destruction i.e., demand for crude is coming down due to high prices.

Praveen: That is bad news for economic activity and the stock markets, isn't it?

Naveen: Possibly. That makes it all the more important for investors to keep a close eye on this interplay of crude futures and the physical market.

The Billion-barrel Hormuz Oil Shock is about to Crash Demand

Traders warn a sharper demand correction is imminent if the Strait remains shut

Bloomberg

The Strait of Hormuz oil shock has yet to crash demand as the rich world borrows from its stocks and pays up to secure supply. Traders are now sounding the alarm that a harsh adjustment is coming.

The longer the vital oil channel doesn't reopen, traders say, the more consumption is going to have to recalibrate lower to align with supply that's dropped at least 10%. And for that to happen, people will have to buy less, either through prices they can't afford, or government intervention to force consumption down.

A billion barrels of supply loss is already all-but guaranteed — more than double the emergency inventories that governments released not long after the conflict began at the end of February. Buffers are being used up fast, helping to keep a lid on oil prices for now. But with the closure now in its ninth week, demand destruction that started in less obvious sectors like petrochemicals in Asia, is quietly spreading to everyday markets the world over.

"Demand destruction is happening in places that are not visible pricing centers," Saad Rahim, chief economist of trader Trafigura Group, told the FT Commodities Global Summit in Lausanne this week. "That adjustment is already happening, but if this continues, it has to get larger and larger. We're at a critical inflection point."

The most dependent industries and markets — including petrochemicals plants in Asia and the Middle East, and shipments of liquefied petroleum gas, a vital cooking fuel in India — saw an immediate hit when the US and Israel first attacked Iran on February 28.

Now, with a stalemate between US President Donald Trump and his Iranian adversaries dragging on, the impact is increasingly shifting west — and to products that are central to consumers' everyday lives. Airlines in Europe and the US are cutting thousands of flights.

Analysts are warning of weakness in con-



Fuelling Disruption

Strait of Hormuz disruption cuts global oil supply by at least 10%

1 billion barrels of supply loss already locked in

IEA nations such as the US, Germany and Japan announced an emergency release of 400 million barrels

Supply shortfall could hit 5 million barrels/day (5% of global supply)

Global demand set for biggest drop in 5 years, says IEA

Diesel prices in Europe cross \$200/barrel, triggering supply concerns

India faces LPG supply strain and potential diesel rationing risks

Prolonged closure risks global recession trigger

Thousands of flights scrapped globally as airlines cutting capacity

sumption of gasoline after prices hit \$4 a gallon in the US, and diesel — used to power everything from trucks to construction equipment. Global oil demand is on track to slump the most in five years this month, according to the International Energy Agency, which coordinated the emergency measures by major economies to counteract the supply shock.

Trading giant Gunvor Group estimates the loss could double next month to 5 million barrels a day, or 5% of world supplies, and along with other major traders sees a growing risk of economic recession. Other analysts say that the impact has already reached around the 4 million a day mark.

That toll is beginning to take shape. Germany has slashed economic growth forecasts in half, while the International Monetary Fund has trimmed global estimates, citing the war.

In the most "severe" of three scenarios modelled by the European Central Bank, Brent prices peak at \$145 a barrel and cut the region's growth in half. The need for oil demand and economic activity to adjust lower, most likely through prices that discourage consumption, will only increase with every day the strait stays shut.

Worldwide demand already faces a hit of 5.3 million barrels a day this quarter, and a 12-week disruption of Hormuz would propel Dated Brent, the world's key physical crude price, above this month's record to \$154 a barrel, according to consultant FGE NexantECA.

"Because there is still no visible disaster" in the west, "people think everything is okay, and a bit higher pump prices are the only impact," said Cuneyt Kazokoglu, FGE's director of energy transition. But demand destruction "will come and is coming in waves. Asia was first in line, Africa is the next one. Europe has already started talking about the lack of some fuels and feeling the price impact."

Ultimately, in a market where demand needs to adjust down to match lower supply, oil prices may be what drive that recalibration. In extreme scenarios, where price alone forces the market to balance, FGE estimates that crude oil would need to surge to \$250 a barrel.

Several analysts said privately that extreme uncertainty about what will happen in the conflict makes it almost impossible to model the demand impact. But without a swift resolution, the economic consequences could be profound.

तनाव के बीच सरकार ने घरेलू एलपीजी, पीएनजी की 100% आपूर्ति सुनिश्चित की

नई दिल्ली, एएनआइ : पेट्रोलियम और प्राकृतिक गैस मंत्रालय ने शनिवार को बताया कि पश्चिम एशिया में चल रहे संकट के बावजूद सरकार ने घरेलू एलपीजी, पीएनजी और वाहनों के लिए सीएनजी की 100 प्रतिशत आपूर्ति सुनिश्चित की है। साथ ही मंत्रालय ने नागरिकों से अपील की है कि वे पश्चिम एशिया की स्थिति के बीच घबराकर एलपीजी, पेट्रोल व डीजल की खरीदारी करने से बचें। हमारे पास ईंधन का पर्याप्त स्टॉक है।

मंत्रालय ने कहा कि घरेलू एलपीजी सिलिंडर की डिलीवरी स्थिर बनी हुई है और किसी वितरण केंद्र पर कमी नहीं है। आनलाइन बुकिंग लगभग 99 प्रतिशत तक बढ़ गई है। कालाबाजारी और जमाखोरी रोकने के लिए एलपीजी सिलिंडर डिलीवरी आर्थेंटिकेशन कोड (डीएसी) के आधार पर दिए जा रहे हैं और यह आंकड़ा 94.5% से अधिक बढ़ गया है। व्यावसायिक एलपीजी आवंटन भी 70% तक बढ़ा दिया गया है।



पेट्रोलियम और प्राकृतिक गैस मंत्रालय। फाइल

▶ नागरिकों से घबराकर खरीदारी न करने की अपील की

▶ कहा - हमारे पास एनपीजी, पेट्रोल और डीजल का पर्याप्त स्टॉक

इस बीच, बंदरगाह, शिपिंग और जलमार्ग मंत्रालय ने कहा कि होर्मुज स्ट्रेट में फंसे सभी भारतीय जहाज और उन पर सवार नाविक सुरक्षित हैं। विदेश मंत्रालय ने कहा कि ईरान से अब तक 2,443 भारतीय निकल चुके हैं।

देशभर में 2400 से अधिक छापे : सरकार ने कहा कि एलपीजी वितरण की निगरानी भी तेज कर दी गई है। शुक्रवार को देशभर में 2,400 से अधिक छापे मारे गए और 309 वितरण केंद्रों पर जुर्माना

लगाया गया जबकि 70 गैस एजेंसियों के लाइसेंस निलंबित किए गए। इसके अलावा केंद्र वैकल्पिक ईंधनों को बढ़ावा दे रहा है और मार्च से अब तक 5.36 लाख पीएनजी कनेक्शन सक्रिय किए गए हैं। एक दिन पहले भी सरकार ने कहा था कि देशभर में ईंधन की उपलब्धता पर्याप्त बनी हुई है। पेट्रोल और डीजल की आपूर्ति भी पर्याप्त है। किसी भी पेट्रोल पंप पर कमी की कोई सूचना नहीं मिली है।