



Can Futures Determine the Future Price of Oil?

Understanding how West Texas Intermediate crude oil is -\$37/barrel

The headline from NBC News on Monday, April 20th was startling as it screamed:

“U.S. crude oil futures for May plummet to minus \$37 — lowest price in history.”

And it was true, sort of. The truth is that May delivery of West Texas Intermediate crude oil – the U.S. benchmark crude oil – did close to a new low of minus \$37.63/barrel by the time the market closed on Monday, April 20th.

But the price of an actual barrel of West Texas Intermediate crude oil was not negative \$37.63 – that was a futures contract. Let’s explore the differences.

Understanding Futures Contracts

A futures contract is an agreement to buy or sell an asset at a future date at an agreed-upon price. And it’s staggering what people trade – copper, gold, oil, pork bellies – as well as strange things like international skimmed milk, cheese, frozen orange juice and pepper. But they’re trading the futures contracts.

Futures contracts are standardized agreements that trade on an exchange: one party agrees to buy a given quantity of something (like a barrel of oil) at a specific price and take delivery on a specific date. The selling party agrees to provide the quantity of that something on that date and at that price.

One of the main benefits of futures contracts is that it allows both sides entering into the futures contract to protect against wild price fluctuations.

Delta Airlines and Phillips 66 Aviation

Consider how Delta Airlines and Phillips 66 Aviation (a large fuel distributor for the commercial aviation industry) might use futures:

- Delta wants to avoid an unexpected increase in the price of jet fuel. Delta buy a futures contract agreeing to buy 1 million gallons of jet fuel on August 1st at \$5/gallon.
- Phillips 66 Aviation wants to protect against an unexpected decline in the price of jet fuel. Phillips 66 Aviation sells a futures contract agreeing to deliver 1 million gallons of jet fuel on August 1st at \$5/gallon

In this example, both companies actually want to trade the underlying commodity (jet fuel) for their business. They use the futures market to manage their exposure to the risk of price changes – Delta doesn’t want the prices to go up and Phillips 66 Aviation doesn’t want the price to go down. Simple.

But Wait, There’s More...

But not everyone in the futures market actually wants to exchange a product like jet fuel (or any product for that matter).

There are others – call them investors or maybe even speculators – who aim to make money off of the price changes in the futures contracts.

In the above example, if the price of jet fuel rises, the futures contract itself becomes more valuable (because it entitles someone to get jet fuel at a lower price), and the owner of that futures contract could sell it to another entity – like United Airlines.

In fact, there are a lot of these types of traders buying and selling futures contracts with zero intention of ever actually taking delivery of the underlying commodity. Instead they're just "investing" in the price movements of the futures contracts.

Back to the Price of Oil

Again, on Monday, April 20th, May delivery for West Texas Intermediate hit minus \$37.63/barrel. That essentially meant that producers would pay buyers to take oil off their hands – in May.

By close of the markets on Wednesday, April 22nd, delivery for West Texas Intermediate crude, according to the CME Group, was as follows:

- June delivery of about \$14/barrel
- July delivery of about \$21/barrel
- August delivery of about \$24/barrel
- September delivery of about \$26/barrel
- October delivery of about \$27/barrel
- November delivery of about \$28/barrel
- December delivery of about \$29/barrel

The actual price of a single barrel of West Texas Intermediate Crude? That's \$26.49 as of April 22nd.

Will the futures markets determine the price of oil? Not really. No more than anyone can tell you where the Dow Jones Industrial Average will close on December 31, 2020.