

OIL GOES SUB-ZERO

What Monday's collapse in the WTI oil price to almost minus 40 dollars means.

IN A NUTSHELL

- _ Monday's WTI oil-price collapse partly reflected the short-sightedness of some market participants with regard to physical storage constraints.
- _ It also highlights the continuing pressures on oil prices, despite the recent agreement among OPEC+ countries and other oil producers to cut production.
- _ While there might well be further temporary market dislocations, the end result is likely to be a healthier set of oil-market dynamics.

Perhaps, it is a sign of the times we live in. Over the past decade, investors have had to get used to the idea of nominal interest rates falling below zero – something economists once thought would be impossible. Could oil be the next asset where negative prices become the new normal?

We do not think so. To be sure, there might well be further temporary market dislocations like the ones we saw on Monday. Making sense of what happened requires a bit of background of how the market for physical crude oil works. Oil is mostly traded via futures contracts expiring each month. When a future expires, the buyer has to take physical delivery of the asset from the seller shortly thereafter. Crucially, delivery has to take place at a delivery point specified in the contract. In the case of West Texas Intermediate (WTI), the U.S. benchmark contract for pricing oil, that location is landlocked Cushing in Oklahoma, also known as the "Pipeline Crossroads of the World."

On Monday, prices for the shortly expiring WTI contract fell below zero for the first time ever. That meant that producers or traders were essentially paying other market participants to take the oil off their hands on the next delivery date. Storage capacity at Cushing is limited and typically rented out under long-term leases. As a result, only those who had leased spare storage capacity could buy the contracts. These market participants will probably make a killing: they are likely to be able to sell the oil bought at minus 30 or 40 U.S. dollars for about 20 dollars, which is where the next WTI futures contract (June contract) is currently trading.¹

THE EPISODE HAS THREE IMPLICATIONS:

First, it highlights the continuing pressures on oil prices, despite the recent agreement among OPEC+ countries and other oil producers to cut production. In our view, these cuts, which amount to about 12.5 million barrels per day for OPEC alone (compared to current production levels) are likely to be insufficient to make up for the collapse in demand caused by the Covid-19 crisis.

Second, storage is likely to remain a key concern, especially, but not only for WTI crude at the Cushing delivery point. "At Cushing, inventory already stood at about 55 million barrels for the week ending April 10, an increase of 5.6 million barrels from the previous week. At this pace, Cushing could run out of room in 4 to 5 weeks," explains Darwei Kung, Head of Commodities at DWS. Moreover, the market has already turned its attention to production capacity of U.S. refineries. Demand for fuels will probably remain suppressed, for as long as drivers are stuck at home and planes remain grounded. As storage for downstream products (such as fuels) is also constrained, that may lead to further cuts of capacity utilization at refineries, resulting in more pressure on crude oil prices. Brent, the main European benchmark, is unlikely to escape altogether. However, Brent delivery points are not nearly as congested, and could benefit from the OPEC+ agreement sooner than WTI. Crucially, Brent is typically seaborne, meaning that one way to store is to hire tankers.

¹ For a good overview of the market dynamics, see this excellent explainer in the Financial Times: <https://www.ft.com/content/88997d67-bf69-409e-8155-911fc1f2fd6f>

This takes us to the third implication. As explained above, the size of Monday's move partly reflects the short-sightedness of some market participants. It seems less likely to us that as many will make this mistake again next month, or the month after. An analogy with another energy market might be helpful to illustrate why. In European electricity markets, negative prices for hourly contracts have become increasingly common over the past decade.² The growth in renewable energy, and especially wind, has made key sources of electricity generation increasingly unpredictable. Crucially, electricity cannot be physically stored. It has to be used, for example, by pumping up water to the reservoir of a hydropower plant. Such plants are costly to build and maintain, however.

No similar physical constraints appear to exist for U.S. storage capacity. If more is needed, more will be built eventually. While there might well be further temporary market dislocations, especially for WTI, for example when the next future contract expires, the end result is likely to be a healthier set of oil-market dynamics. U.S. supply might well decline faster than it otherwise would have, resulting in a strong price recovery in late 2020 and early 2021, once the worst of the Covid-19 crisis is behind us.

In the meantime, the oil-price decline is likely to exert further downward pressure on inflation and inflation expectations. This is consistent with our view that interest rates will remain low for quite a while. Commodity currencies, such as

the Russian ruble, are likely to remain under pressure. As far as bonds are concerned, oil-exporting countries and the U.S. high-yield sector appear especially exposed. Keep in mind, however, that U.S. high-yield spreads are already much wider than during the oil-price decline in late 2015 and early 2016.

For most equity markets, the direct implications appear more modest. In 2019, the energy sector accounted for only about 4% of the earnings of the S&P 500 companies, and 6% for those in the MSCI AC World Index. Of course, some countries have larger energy sectors, notably certain emerging markets, such as Russia, but also the UK. More significant, though, may be the indirect effects on economic growth, as oil companies cut capital expenditure further. This will hurt oil-service companies and equipment makers. U.S. and Canadian banks, with loan exposure to the sector, are also at risk. Last but not least, the psychological effects on consumers, businesses and investors should not be underestimated. For most industrial countries, you would normally expect lower oil prices to be taken as good news, as they mean lower gasoline prices for consumers and lower input costs for many producers. But at a time when so many are stuck at home, this oil-price collapse is unlikely to provide much of a sentiment boost.

² For overviews on German prices, see <https://www.bhkw-infozentrum.de/faq-bhkw-kwk/negative-strompreise-wie-haeufig-kommen-negative-strompreise-vor> and <https://www.strom-magazin.de/info/negative-strompreise/>

GLOSSARY

Brent crude is a grade of crude oil dominant in the European market.

Capital expenditure (Capex) are funds used by a company to acquire or upgrade physical assets such as property, industrial buildings or equipment.

Emerging markets (EM) are economies not yet fully developed in terms of, amongst others, market efficiency and liquidity.

A **futures contract** is a standardized, contractual agreement to trade a financial instrument or commodity at a pre-determined price in the future.

High-yield bonds are issued by below-investment-grade-rated issuers and usually offer a relatively high yield.

Inflation is the rate at which the general level of prices for goods and services is rising and, subsequently, purchasing power is falling.

The **MSCI AC World Index** captures large- and mid-cap companies across 23 developed- and 24 emerging-market countries.

In economics, a **nominal** value is not adjusted for inflation; a real value is.

OPEC+ is an informal alliance of OPEC members and other oil-producing countries, led by Russia, aiming to coordinate their production strategies.

The **Russian ruble (RUB)** is the official currency of the Russian Federation.

The **S&P 500** is an index that includes 500 leading U.S. companies capturing approximately 80% coverage of available U.S. market capitalization.

The **spread** is the difference between the quoted rates of return on two different investments, usually of different credit quality.

The **U.S. dollar (USD)** is the official currency of the United States and its overseas territories.

West Texas Intermediate (WTI) is a grade of crude oil used as a benchmark in oil pricing.

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