

## Retail Investors Hit By Oil Price Drop May Turn To The Courts

By Sreyoshi Das, Ilan Guedj and Zhong Zhang (May 28, 2020, 4:44 PM EDT)

On April 20, for the first time, the price of West Texas Intermediate, or WTI, light sweet crude oil fell below zero, to  $-\$36.98$  per barrel. The price of oil in the near-term futures market closely followed, marking a record 306% decline from the previous closing price.[1] This negative price meant that sellers were willing to pay buyers to take oil off their hands.

This situation was, in large part, a result of the collapse of demand for oil across the world due to the COVID-19 global pandemic and, as production of oil could not scale down, there was a severe lack of storage for crude oil.[2] The near-month futures contract for delivery of oil in May were due to expire on April 21, so investors struggled on April 20 to find more storage for oil they didn't yet have and wanted to sell their contracts to avoid taking physical delivery of it.

Since the COVID-19 pandemic started a few months ago, the price of oil has been volatile. The market expectation of future volatility in this market is measured by the Chicago Board Options Exchange Crude Oil ETF Volatility Index, also known as the Oil VIX, or OVX.[3]

OVX reached its highest point ever during the week of April 20. The peak volatility that week was more than three times the peak volatility recorded during the financial crisis of 2008–09.[4] This volatility has had a significant impact on investors.

Futures trading is mark-to-market, and may call for large margins to be put up with brokers. For example, Hong Kong's securities regulator has urged brokers to take caution while trading in oil futures, and to back trades from sophisticated clients.[5]

In the U.S., the Chicago-based derivative exchange CME Group instructed the U.S. Oil Fund, or USO, to hold only limited June futures contracts.[6] In addition, some plaintiff law firms started investigating potential implications of this precipitous price drop for U.S. investors.[7]



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## **Oil Markets in the Past Few Months**

The spot price of WTI in dollars per barrel, and the near-month futures contract trading on the New York Mercantile Exchange decreased significantly after January.[8] WTI traded for \$61.2 per barrel on Jan. 2, but fell to -\$36.98 per barrel on April 20.

While the WTI Crude Oil Spot Price is the price for immediate delivery of WTI grade oil, the one-month futures price measures the expected spot price of one barrel of crude oil one month from today plus storage costs.[9] The one- to four-month future contract prices closely tracked each other until mid-March, after which the prices started diverging.

Starting in early April, the further-month futures price was relatively higher than the nearer-month futures price. This situation — where crude prices for future delivery are above the spot rate — is commonly referred to in futures markets as contango. It usually happens when investors are worried about taking physical delivery of oil, implying that storage is fuller than usual.

On April 20 — the day before the futures contracts for delivery in May were supposed to expire — the price of oil for May delivery dropped by 306%. In comparison, the price of the next month's futures contract only fell by 18.4%, and the price of following months' contracts fell by even less.[10]

This extreme contango implies that investors believed that as the economy recovers and demand picks up in the future months, storage for oil will become available.

## **The U.S. Oil Fund**

The USO is an exchange-traded fund, or ETF, that uses near-term futures contracts to track the price of WTI crude oil.[11] ETFs such as USO allow retail investors exposure to the oil markets.

To track the changes in WTI price, USO buys the front-month futures contract, and when the contract's expiration is near, it shifts to hold the following month's futures contract. In a contango scenario, where the following month's futures contract price is higher than the current one, USO strategy forces it to sell the current contract for a lower price, and to replace it with the more expensive following month's contract.

The price of USO was \$102.48 per share on Jan. 2, and steadily fell until it reached \$22.48 per share on April 21.[12] The COVID-19-related extreme contango resulted in huge losses for USO investors.

These losses are due to the drop in oil prices, but were exacerbated by the contango, which required rolling futures contracts and replacing them with more expensive ones. Due to the situation in the futures market — and in part also due to orders from the CME Group — USO modified its investment objective.[13]

In April, USO submitted 10 8-K filings with the U.S. Securities and Exchange Commission, consisting of changes including announcing a one-for-eight reverse share split.[14] The April 27 8-K filing states USO's intentions to invest in futures contracts as far out as July 2021.[15]

These investment intentions were evolving almost daily; USO had published its intention to go as far out as September 2020 only three days before, on April 24.[16] By the end of April, investors who were not monitoring their investment in the USO ETF daily may have found themselves with an investment that

provided an altered exposure to oil prices.

### **Bank of China's WTI Crude Oil Tracking Product**

Foreign retail investors have also been impacted by the drop in WTI crude oil prices. The Bank of China, or BOC, has an investment product called Yuan You Bao (Crude Oil Treasure) that tracks the nearby-month WTI crude oil futures contract. BOC markets this tool to Chinese retail investors who usually have a very limited understanding of the futures market.

Yuan You Bao is designed to roll over on the last trading day of the WTI futures contract. This rollover arrangement did not cause problems in markets with normal liquidity conditions, but did expose investors to significant losses when the current contango began on April 20.

The latest estimation of investors' losses is more than \$1 billion.[17] Chinese financial market regulators are evaluating the situation, and have not decided who should be responsible for the losses. Among the Chinese investment community, there are discussions about a class action lawsuit against BOC.[18]

Though this product is sold exclusively to retail investors in China, its trading is performed in U.S. markets. Evidence suggests that Yuan You Bao is clearing its WTI contracts at the CME Group through BOCI Commodities and Futures (USA) LLC, a CME Group clearing.[19]

### **Conclusion**

The large drop in oil prices and in the prices of futures contracts tied to oil that resulted from the COVID-19 global pandemic has generated substantial losses for many investors that sought exposure to oil. This includes retail investors with direct exposure to oil prices with investments in futures contracts that are rolled from month to month.

When longer-term futures contracts trade at a higher price than futures contracts that expire soon — i.e., contango — any investment vehicle that rolls contracts from month to month will experience additional losses as a result. When the magnitude of contango is magnified by short-term price volatility caused by market frictions — for example, limited storage capacity — rollover costs become prohibitive. Thus, retail investors in the U.S. and around the world who invested in products that rolled oil futures contracts suffered losses due to the drop in oil prices, exacerbated by the extreme contango.

This large drop in oil prices and its impact on funds rebalancing futures market contracts is reminiscent of the "Volpocalypse" in February 2018. Following the Dow Jones Industrial Average experiencing its two largest one-day point declines in history, the Cboe Volatility Index, or VIX, experienced its largest daily increase on record, a 115% increase.

After that increase, the VIX decreased, which resulted in litigation about known and unknown risks in investor products following the VIX.[20] This litigation was subsequently dismissed, with the court noting that Credit Suisse "clearly disclosed defendants' intention to hedge its exposure to the ZIV ETNs and the effects that such rebalancing and hedging activity could have on the value of the ETNs." [21]

The even larger drop in USO will likely result in similar litigation. However, since contango risk was discussed in the fund's prospectus, litigation may end up focusing on the repeated and unprecedented 8-K filings, the rapid changes in the fund objectives and the impact of those changes on investors.

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[1] The near-month futures price dropped from the closing price of \$18.27 per barrel on Friday, April 17, 2020, to closing a price of -\$37.63 per barrel on Monday, April 20, 2020.

[2] On April 12, OPEC+ announced a deal to cut production for May and June 2020, although that may not be enough to stabilize the markets. See Clare Duffy and Jill Disis, "OPEC+ reaches deal to cut oil production by 9.7 million barrels per day," CNN Business, April 13, 2020, <https://www.cnn.com/2020/04/12/energy/opec-deal-production-cut/index.html>.

[3] The Chicago Board Options Exchange started publishing the oil volatility index on July 15, 2008. The index measures the market's expectation of 30-day volatility of crude oil prices based on the options traded on the United States Oil Fund ETF. See Cboe, "About Cboe — Investor Relations," accessed May 1, 2020, <http://ir.cboe.com/press-releases/2008/14-07-2008a>. The OVX is the first commodity-based volatility index.

[4] The value of OVX on April 21 was 325.15, and the highest value during 2007–2009 was 100.42 on Dec. 11, 2008. In the current year, OVX surpassed 100 on March 9, and has been consistently above 100 since then, barring a few occasions.

[5] See McCord Pagan, "HK Regulators Warn about Volatility of Oil Futures Market," Law360, April 24, 2020, <https://www.law360.com/securities/articles/1267136/hk-regulators-warn-about-volatility-of-oil-futures-market>.

[6] See Catherine Ngai and Katherine Greifeld, "US Oil Fund Ordered to Limit Position, Faces Regulator Concern," Bloomberg, April 24, 2020, <https://www.bloomberg.com/news/articles/2020-04-24/us-oil-fund-says-cme-has-ordered-it-to-limit-futures-positions>.

[7] See, e.g., Business Wire, "Nationally Ranked Litigation Firm Labaton Strongly Encourages United States Oil Fund LP (USO) Investors with Losses of More than \$250,000 in Its ETF Shares or Options to Contact the Firm and Announces Investigation," April 22, 2020, <https://www.businesswire.com/news/home/20200422005573/en/Nationally-Ranked-Litigation-Firm-Labaton-Strongly-Encourages>.

[8] NYMEX is a commodity futures exchange owned and operated by CME Group of Chicago.

[9] For crude oil, each futures contract expires on the third business day prior to the 25th calendar day of the month preceding the delivery month. If the 25th calendar day of the month is a nonbusiness day, trading ceases on the third business day prior to the business day preceding the 25th calendar day. After a contract expires, the one-month future for the remainder of that calendar month is the second

following month. The two- to four-month futures contracts represent the successive delivery months following Contract 1. See US Energy Information Administration, "Definitions, Sources, and Explanatory Notes: Petroleum Prices — Futures Prices (NYMEX)," accessed May 1, 2020, [https://www.eia.gov/dnav/pet/TblDefs/pet\\_pri\\_fut\\_tbldef2.asp](https://www.eia.gov/dnav/pet/TblDefs/pet_pri_fut_tbldef2.asp).

[10] The two-, three- and four-month contract prices dropped by 18.4%, 10.7% and 8.6%, respectively.

[11] "The investment objective of USO is for the daily changes in percentage terms of its shares' NAV to reflect the daily changes in percentage terms of the spot price of light, sweet crude oil delivered to Cushing, Oklahoma, as measured by the daily changes in price of USO's Benchmark Oil Futures Contract, less USO's expenses." See USCF, "United States Oil Fund," accessed May 1, 2020, <http://www.uscfinvestments.com/uso>.

[12] This price per share reflects the price post the one-for-eight reverse split. The one-for-eight reverse split was announced on April 22, 2020 and was implemented at the closing of April 28, 2020. As a result of the reverse share split, every eight pre-split share resulted in one post-split share. This means in pre-split prices, the price per share fell from \$12.81 on January 2 to \$2.81 on April 21.

[13] The April 24 8-K filing states, "In response to current and evolving regulatory limitations, ongoing extraordinary market conditions in the crude oil markets, including super Contango, volatility and large purchases of shares in USO, as well as regulator concerns about the size of its positions in the Benchmark Futures Contract, USO announced, as described above, that it intended to invest in Oil Futures Contracts other than the Benchmark Oil Futures Contract and could, if it determined it appropriate in light of market conditions and regulatory requirements, invest in Other Oil-Related Interests. The above June futures contract on the NYMEX is the current Benchmark Oil Futures Contract. The Benchmark Oil Futures Contract is the futures contract on light, sweet crude oil as traded on the NYMEX that is the near month contract to expire, except when the near month contract is within two weeks of expiration, in which case it will be measured by the futures contract that is the next month contract to expire. Historically, USO has achieved its investment primarily by investing in the Benchmark Oil Futures Contract and in oil futures contracts for light, sweet crude oil traded on ICE Futures with the same maturity month as the Benchmark Futures Contract. In making this announcement, USO disclosed that the selection of investments intended to meet USO's investment objective other than the Benchmark Futures Contract may impact the performance of USO and can make it difficult for USO to track the Benchmark Futures Contract or meet its investment objective."

[14] See USCF, "United States Oil Fund," accessed May 5, 2020, <http://www.uscfinvestments.com/resources-filings/commodities/uso>.

[15] The April 27 8-K filing states, "Commencing on April 27, 2020 and through April 30, 2020, for the reasons set forth below and, in particular because of evolving market conditions, regulator accountability levels and position limits being imposed on USO with respect to the Oil Futures Contracts, and risk mitigation measures taken by its FCM with respect to USO acquiring additional Oil Futures contracts, USO has determined that it will invest in Oil Futures Contracts as follows: approximately 30% of its portfolio in crude oil futures contracts on the NYMEX and ICE Futures in the July contract, approximately 15% of its portfolio in crude oil futures contracts on the NYMEX and ICE Futures in the August contract, and approximately 15% of its portfolio in crude oil futures contracts on the NYMEX and ICE Futures in the September contract, and approximately 15% of its portfolio in crude oil futures contracts on the NYMEX and ICE Futures in the October contract, and approximately 15% of its portfolio in crude oil futures contracts on the NYMEX and ICE Futures in the December contract, and

approximately 10% of its portfolio in crude oil futures contracts on the NYMEX and ICE Futures in the June 2021 contract. USCF will roll the current portfolio positions into the positions described above over a three-day period with approximately 33.3% of the investment changes taking place each day on each of April 27, 2020, April 28, 2020, and April 29, 2020."

[16] USO announced that as of April 24, it may invest approximately 20% of its portfolio in crude oil futures contracts on the NYMEX and ICE Futures Europe and ICE Futures U.S. (together, "ICE Futures") in the June futures contract, approximately 40% of its portfolio in crude oil futures contracts on the NYMEX and ICE Futures in the July contract, approximately 20% of its portfolio in crude oil futures contracts on the NYMEX and ICE Futures in the August contract, and approximately 20% of its portfolio in crude oil futures contracts on the NYMEX and ICE Futures in the September contract.

[17] "Did West Texas Intermediate Collapse Burn US\$1 Billion Hole in Bank of China Investors' Pockets?" South China Morning Post, April 27, 2020, <https://www.scmp.com/business/money/markets-investing/article/3081678/did-west-texas-intermediate-collapse-burn-us1>.

[18] Sunny Oh, "Bank of China Sold Oil's May Contract into a Historic Implosion in Crude—And Retail Investors May Have Gotten Crushed," MarketWatch, April 23, 2020, <https://www.marketwatch.com/story/bank-of-china-sold-oils-may-contract-into-a-historic-implosion-in-crude-and-retail-investors-may-haven-gotten-crushed-2020-04-22>.

[19] See Huang Mengqi, "Crude Oil Treasure' Design Path Finally Found Out," Sina Finance, April 27, 2020, <http://finance.sina.com.cn/zl/china/2020-04-27/zl-iirczymi8646180.shtml>; CME Group, "BOCI Commodities and Futures (USA) LLC, accessed May 1, 2020, <https://www.cmegroup.com/tools-information/find-a-broker/boci-commodities-and-futures-limited.html>; Bloomberg, "BOC International Holdings Limited," accessed May 1, 2020, <https://www.bloomberg.com/profile/company/0172682D:HK>.

[20] See Reddan, Darcy, "ProShares Sued Over Fund Destroyed By The Volpocalypse," Law360, Jan. 19, 2019, <https://www.law360.com/articles/1123822/proshares-sued-over-fund-destroyed-by-the-volpocalypse->.

[21] See Ruscoe, Emilie, "VIX Notes Investors Were Amply Warned of Risks, Judge Finds," Law360, April 29, 2020, <https://www.law360.com/articles/1268491/vix-notes-investors-were-amply-warned-of-risks-judge-finds>.