



April 21, 2020 | Quick Take

Effects of Oil Price Volatility on ETFs (Updated)

Last month, we released a [piece](#) on energy and high yield ETF correlations following the OPEC meeting in early March that spurred the Saudi-Russia oil price war. Below, we refresh some of the data in light of yesterday's oil market activity, as May '20 WTI crude oil futures dropped below zero and traded as low as -\$40/barrel¹.

USO, which tracks WTI futures, was more acutely affected this week than in March. USO has traded at a premium since yesterday's close, and this morning trading was temporarily halted for the announcement of news that creations are suspended. In contrast, we saw comparatively less disruption in high yield and broad energy ETFs.

While March's move reflected geopolitical and macroeconomic events that fundamentally changed the value of a barrel of oil, this week's move into negative price territory seems to have been a reaction to a transient phenomenon in the physical commodities market. The negative prices bear out concerns about storage capacity in the Oklahoma facility that takes delivery for WTI crude, which is already nearing capacity and may falter under May's influx. Effectively, whoever held the contract on April 22nd would have to take delivery without a guarantee that they would have somewhere to store it.

USO Suspends Creations

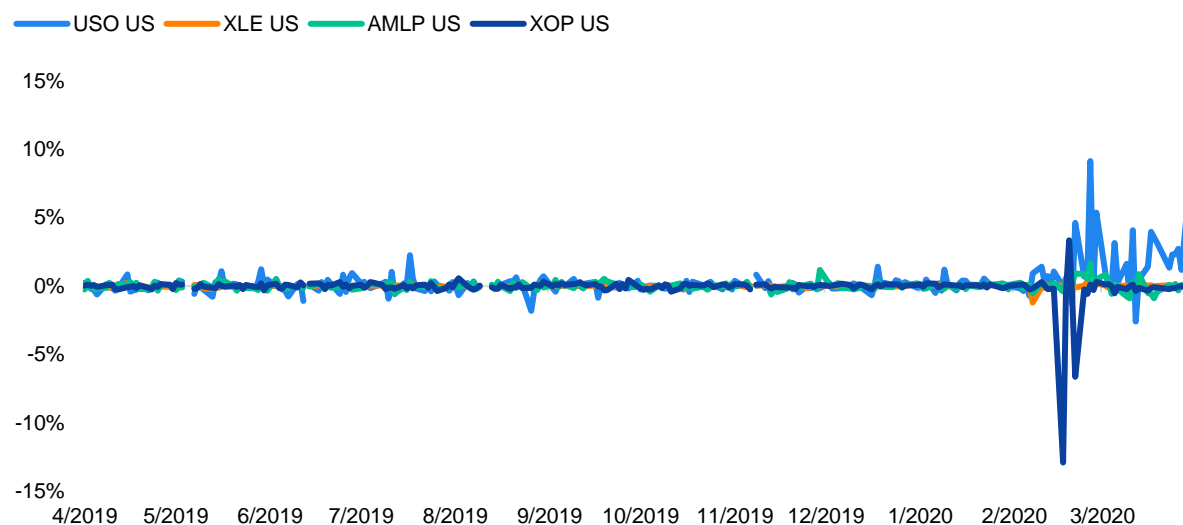
Today, USO halted creations after hitting the cap for outstanding shares as listed in their prospectus. USO has also filed with the SEC to create 4 billion more shares. If the filing is approved, the creation halt will be lifted.

Additionally, the fund experienced 4 limit-up-limit-down pauses and 2 news pending halts over the course of the day. These events alter the risks and considerations associated with trading USO.

¹ Notably, this drop below zero was isolated to the May contracts for WTI crude. Brent crude, which is stored on ships and whose May contracts have already settled, only fell 8.9% and stayed above \$25/barrel. Similarly, the May futures were impacted because they settle on April 21, while contracts that settle further out stayed in the +\$20 range during US market hours. However, both Brent and WTI June contracts saw a larger dip after the European markets opened and have continued dropping through US trading hours.

Elevated Premiums

Select Energy ETF Premium-Discounts



Source: Bloomberg as of April 20, 2020

USO's premiums were elevated today, at times trading over 30% higher than its intraday NAV. These premiums, already elevated from the day before, were exacerbated by the creation halt, which impaired the arbitrage mechanism that keeps ETF prices in line with its underliers. This dislocation could incur significant losses, as buyers would easily lose that premium or more.

Inventory & Risk

The ability to create has two notable impacts. First, market makers lose a way to flatten out their positions and therefore may have to hold inventory. In this case, market makers' appetite for holding inventory may be affected by uncertainty around when the creation halt may be lifted, which could vary based on the SEC's approval timeline. Holding larger inventory for a longer period of time leads to greater risk, which may be incorporated into pricing or decisions of when and how to trade. Second, it limits the ability to borrow shares of USO, leading traders to shift their focus more toward allocating the inventory they have on hand and finding short-term liquidity gaps to fill.

Liquidation Risk

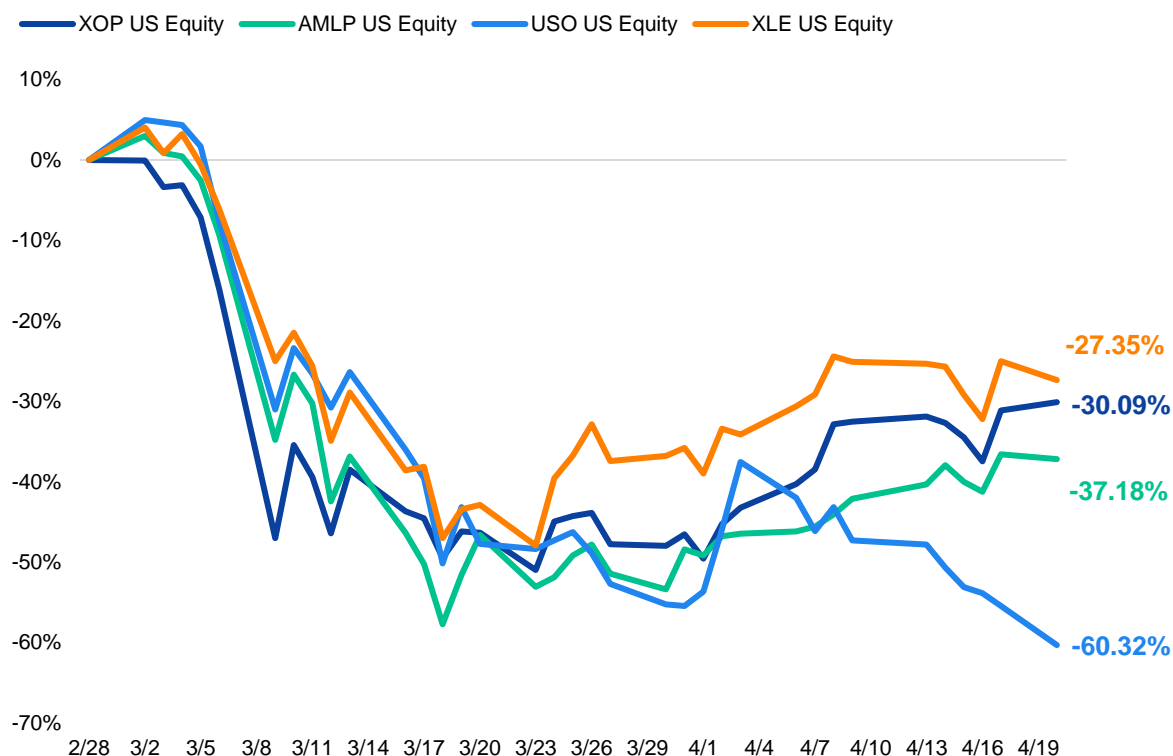
Another consideration market participants may include in their decision-making process is the risk of liquidation. First, it is important to note some exchange rules governing USO: if USO begins trading close to 0, the exchange will first halt, then suspend, then delist the fund. The fund will be delisted if the total value of all available shares drops below \$1 million (~\$.01/share). This is a notable difference between USO and WTI: while WTI can trade below 0, USO cannot. However, liquidation could precede these exchange rules at the discretion of the fund or its prime brokers. If the fund liquidates, proceeds are paid out to the fundholders².

² USO's prospectus also notes "loss of investment" as a possibility in the event of fund liquidation.

The likelihood of USO's value going to 0 is low, because USO's holdings³ currently span June, July, and August contracts (the net value of all three would need to drop to or below zero). However, USO's price can trade at different levels from its NAV, and, as we've seen this week, we cannot rule out anomalous market events.

Broad Energy and High-Yield ETFs

Energy ETFs

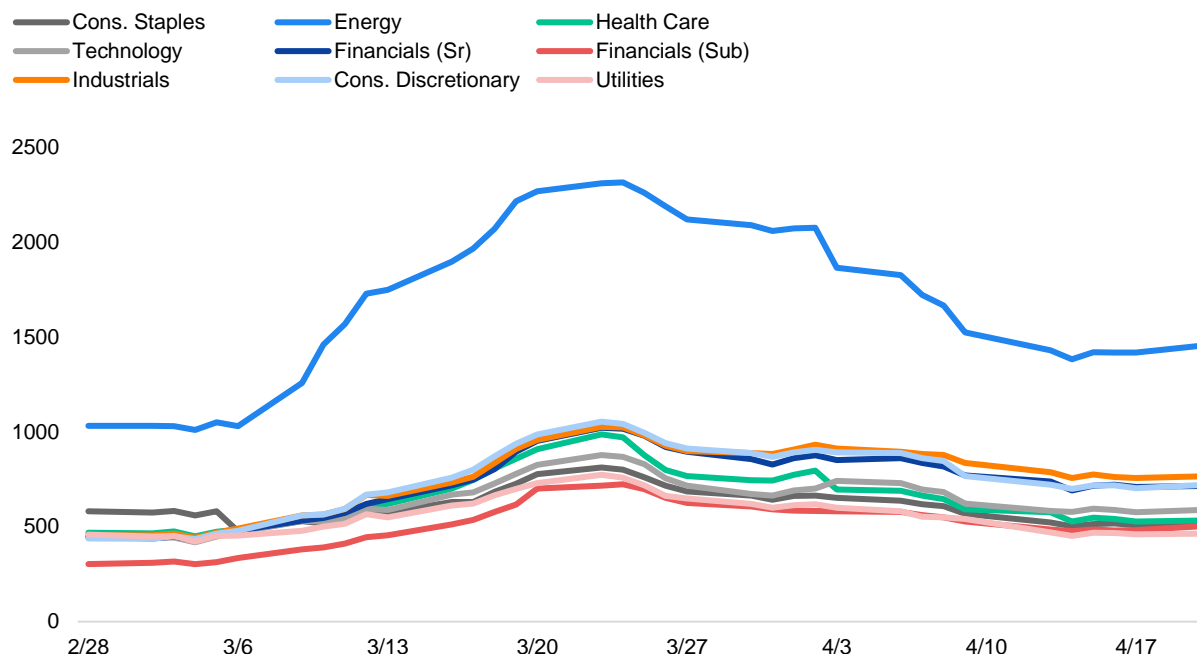


Source: Bloomberg from February 28 - April 20, 2020

In spite of WTI's freefall, many ETFs with high energy holdings only experienced minor price moves. USO is the notable exception, with an 11% drop yesterday followed by a further 25% drop today.

³ USO has recently restructured its holdings to include 3 months of crude contracts outside of the roll period. As of the beginning of this week, USO had no May holdings and has moved a portion of their CLM0 (June) exposure to CLN (July). Today, they allocated 5% of their holdings to CLQ0 (August) and shifted their remaining holdings to 40% CLM0 and 55% CLN. We expect this to reduce the volatility of USO.

US High Yield OAS by Sector



Source: Bloomberg from February 28 - April 20, 2020

Although prices declined yesterday, we did not see the impact of default risk on option-adjusted spreads to the same extent that we did in March. In fact, they are lower than those in late March when oil prices were actively dropping, before stabilizing somewhat around current levels.

Contact Us



Institutional-strategy@janestreet.com

212.548.6700

© 2020 Jane Street Group, LLC. All rights reserved. Issued in the United States by Jane Street Execution Services, LLC (JSES), a U.S. registered broker-dealer and member of FINRA (www.finra.org) and SIPC (www.SIPC.com), in Europe by Jane Street Financial Limited (JSF), a registered dealer authorized and regulated by the U.K. Financial Conduct Authority, and in Hong Kong by Jane Street Hong Kong Limited, a licensed company under the Hong Kong Securities and Futures Commission (CE No. BAL548). This material is provided for informational purposes only and is not for distribution to retail clients or where prohibited by applicable law or regulation. This material does not constitute an offer or solicitation for the purchase or sale of any security or other financial instrument. This material has been prepared by sales and trading personnel in connection with the marketing activities of JSES and is not intended to be a research report. This material does not contain sufficient information upon which to base an investment decision. None of the information provided herein constitutes accounting, tax, or legal advice. For recipients based in Europe, please read JSF's [Data Privacy Policy](#).