

11 May 2022

Via Electronic Delivery

Mr. Christopher J. Kirkpatrick, Secretary Commodity Futures Trading Commission Three Lafayette Center 1155 21st Street, NW Washington, DC 20581

## RE: Comments Responding to Commission Publication of FTX's Request for Amended DCO Registration Order

Dear Mr. Kirkpatrick:

Demand Derivatives Corp. ("DDC") appreciates the opportunity to comment on LedgerX, LLC d.b.a. FTX US Derivatives ("FTX")'s request to amend its order of registration as a derivatives clearing organization ("DCO").

DDC is a startup entity expecting to be a vertically integrated U.S.-regulated futures exchange and clearing house with four innovative, proprietary instrument designs and blockchain clearing on the most liquid, traditional underlying assets. We are currently working on satisfying the requirements to apply to be a Designated Contract Market (DCM) and DCO. Our officers and directors have wrestled with the risks of derivatives clearing throughout their entire careers. We have recently solved the problem and this solution is the basis for our new exchange and clearing house. Our conclusion can be summarized in one sentence:

## "It is impossible to limit risk with unlimited-risk instruments."

Demand Derivatives supports the FTX DCO amendment for two reasons:

- 1. FTX will provide much-needed competition in the U.S. futures industry
- 2. FTX may have a better clearing model

Competition and innovation have been proven time and time again to benefit consumers. FTX's amendment to potentially break through the near monopoly of the CME can only bring better, more efficient markets to the U.S. For this reason alone, the FTX application should be approved.

The question of whether the FTX amendment is a *better* clearing model is subject to debate. We do not have enough clarity on this issue to render a verdict at this time. But this clarity is not required for the CFTC to approve the FTX amendment. As market participants gain more experience and

<sup>&</sup>lt;sup>1</sup> Note: We are not referring to the limited risk offered by long options. Ultimately, even when a long option is used to limit the risk of an another unlimited-risk position such as in a valid spread, one of the counterparties still has unlimited risk that cannot be absolutely limited.

comfort with this novel approach, they will be able to decide for themselves whether the clearing risks are worth taking. It will be simple enough for sophisticated market participants to reflect their best judgment of the risk (or benefit) of FTX's clearing process through the prices of the orders they place on FTX's exchange.

We believe it would be an overreach by the CFTC to categorically deny the FTX amendment. The prudent course of action would be to approve the amendment with a CFTC-stated warning to market participants that the performance of the clearing process cannot be known with certainty and that market participants should be aware of the clearing risks trading on an exchange with a new and relatively untested process. Who better to assess market risks than the actual market participants?

While the FTX proposal seems to be an improvement in the process, it does not solve the problem. Evidence for this can be found in their application outlining a default fund. If defaults were not possible, a default fund would not be needed. In the case of a default, having a default fund is obviously better than having none at all. The question is, will the capital allocated to such a fund be sufficient to protect the financial system? Perhaps.

The true answer may be found sometime in the future when there are large market moves, pockets of illiquidity, or possibly other unknown factors that come into play. When a default occurs and the default fund is needed, we will then see if it is sufficient. Unfortunately, we can never know with any degree of certainty ahead of time if the proposed funding amount of the default fund is sufficient. Current exchanges cannot absolutely guarantee that their default fund is sufficient. The same can be said for FTX's new clearing model. In other words, if the CFTC allows the current clearing model to stand with the small but not zero chance of a cataclysmic destruction of the markets as we know it, then the FTX application must be approved. Only time will tell which method protects the financial system better.

One thing we know for sure is that markets have a way of doing the unexpected.

Until 1987, the thinking was that market crashes were a thing of the past. Until Long Term Capital Management, it was thought that the markets were "too big" for one firm to dramatically alter the landscape. Until the 2010 "flash crash," it was thought impossible for a market to drop 10%, rally back within a few minutes, and then behave as if nothing had happened. Until 2020, it was thought that a commodity could not drop below zero. And until 2022, it was thought that exchanges could not just cancel trades as a way to avoid catastrophic defaults as was done in the Nickel market.

In short, one of these days, the markets are going to throw more misconceptions out the window.

As we know, margins need to be set high enough to cover the risks, but not so high that participants cannot participate and cause large pockets of illiquidity. This is an unenviable task for exchanges and clearing houses. The real problem is that there is no one correct answer — or at least no correct answer that can be known ahead of time.

For example, it is our understanding that current clearing houses set margins rates to cover roughly an expected 99.7% of daily market moves — or about one chance a year that the asset price will move sufficiently to breach that level. Even if such a limit is exceeded, small breaches are not really an issue because "extra" assets are almost always required by a futures commission merchant ("FCM") beyond the strict definition of the margin requirement. The entire industry relies on this principle.

In the FTX case, risk is both reduced and increased at the same time.

Default risk is reduced when markets stay open continuously. There is no longer the close-to-open (i.e., "overnight" and weekend) risk when a market is open 24/365. However, eliminating FCMs from the process increases risks to the financial system because now there is one fewer layer of oversight and capital to access when a default occurs. In other words, there are several "waterfall" provisions with the current approach. We will not enumerate them here. But, one of those waterfall provisions was the FCM's capital as another layer of risk reduction. Since FCM capital is placed at risk in the current approach, they have a strong incentive to ensure customers are not overextended. Eliminating that source of extra capital in the event of a default cannot possibly help the system avoid a default scenario.

The key question is: Can the risk reduction of continuously open markets offset the elimination of an FCM waterfall layer in the event of a derivatives-induced contagion? Unfortunately, we cannot know the answer to this question.

On April 20, 2020, the front-month May 2020 WTI crude contract dropped 306%, or \$55.90, for the session, to settle at -\$37.63 a barrel on the New York Mercantile Exchange. While the first negative settlement price in crude oil was a never-before-seen event, the key figure here is the price movement of 306%. How can a clearing house set a margin rate ahead of time to cover the risk of a price change of 306%? If the typical margin of around 10% of the asset price were increased to 100%, the exchange would be chastised for being punitive and unrealistic. Yet, even at such a level, in this case, they would have been more than 200% deficient at covering the exposure. The only reason such a move did not cause the collapse of the financial system is because exposure was minimal and "contained" due to the next day contract expiration — where most participants had already exited positions or moved exposure to the second contract month. If such a move had happened in stocks, bonds, or even in the primary crude oil contract, the world would be a very different place today.

Would the FTX amendment avoid economic fallout and defaults in this scenario? Possibly. However, one of the key problems was the low liquidity situation due to the majority of crude oil traders' having exited their nearby contract positions. Since the FTX solution relies on liquidity, we have concerns.

Obviously, the FTX exchange may argue that the assets they want to trade do not have this low-liquidity-near-delivery-into-expiration problem. Then again, they cannot guarantee liquidity will be there precisely at the time needed for a forced liquidation regardless of the asset. Again, this same problem exists with current exchanges and clearing houses, so it is not fair to single out or deny the FTX amendment solely on these grounds. However, having said all that, there *is* a solution...

To change the framework.

To do so, derivative instruments (i.e., futures and options) need to be redesigned with the goal of making defaults impossible. Demand Derivatives has solved this problem and as stated above is working toward a DCM/DCO application with the goal of launching another competing exchange in the U.S. We look forward to fixing this issue and jumping into the fray to further enhance competition and innovation in the futures industry.

Thank you again for the opportunity to comment. Sincerely, Robert Krause CEO. Demand Derivatives