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May 10, 2022

Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581

Re: FTX Request for Amended DCO Registration Order

Dear CFTC:

In summary:

- The CFTC should approve the FTX request.
- Technology has eliminated the need to separate FCMs from DCOs.
- Real-time margining reduces risk.
- Combining the FCM with the DCO creates the right incentives to set margins right.
- The CFTC should promote innovation by approving the application.

[1] All opinions are strictly my own and do not necessarily represent those of Georgetown University, FINRA, or anyone else. I am the Academic Director for the FINRA Certified Regulatory and Compliance Professional (CRCP®) program at Georgetown. Over the years I have served as a Visiting Academic Fellow at the NASD (later part of FINRA), served on the boards of the EDGX and EDGA stock exchanges, served as Chair of the Nasdaq Economic Advisory Board, and performed consulting work for brokerage firms, stock exchanges, market makers, and law firms. I've also visited over 75 stock and derivative exchanges around the world. As a finance professor, I practice what I preach in terms of diversification and own modest and well-diversified holdings in most public companies, including brokers, asset managers, market makers, and exchanges.

Background

Traditionally, there were futures brokers (jargonistically known as FCMs), futures exchanges (DCMs in CFTC-speak), and guarantors (DCOs, letter of credit providers, as well as FCMs). Trading took place in physical pits, requiring in-person supervision by flesh and blood humans. The DCOs set margin requirements (under the supervision of the CFTC), and the FCMs dealt with the actual contract users.

We are in the midst of the fintech revolution, in which institutional boundaries are changing, and rightfully so. The innovations in information and financial technology mean that the old institutional boundaries are not necessarily optimal. This is happening throughout the financial services industry in areas including banking, payments, insurance, and securities. It is not just a crypto thing

FTX is already a DCO, and is applying to offer margined futures contracts directly to the public rather than going through separate FCMs. In particular, FTX offers 24/7 trading with real-time automated margining.[2] If a position becomes under margined, FTX immediately begins the liquidation process. There is no margin call, just liquidation.

Modern technology has reduced the reaction time for margin liquidations.

In the past, there were high costs and slow speeds of communication and computation. There were significant time lags between the time when a price change occurred, the calculation of a participant's position, the demand for more margin, and the liquidation of an under margined position. During these time lags, the price could move even further, changing an under margined position into a negative position. one with no margin left or even a negative position. If the customer could not make good on the loss, then the FCM would be responsible to the DCO. If the FCM could not cover the losses, then the DCO would according to its waterfall. The large time gap between a price move and the reaction by the FCM to liquidate the position created the possibility for large losses that would affect the FCM and the DCO.

FTX's proposal meets Core Principal B with regard to financial resources.

The Commission is rightly concerned with whether FTX is putting aside enough resources to cover defaults by users. Fortunately, FTX uses modern risk management that significantly reduces, if not

[2] To be precise, every 30 seconds.

eliminates, the risk of losses from defaulting participants. As my favorite equation in all of finance so clearly states: [3]

TIME = RISK

Technology has reduced the time lags between price movements and margin calls, and thus the associated risk, significantly. FTX can generally liquidate an under-margined position quickly enough so that it does not suffer any losses. FTX would incur losses if the asset price either spiked or crashed faster than it could liquidate. To deal with the possibility of a liquidation during a period of low liquidity, FTX has arrangements with market makers to liquidate such positions. Thus, the expected losses are quite low.

However, in extreme situations one can envision a scenario in which multiple accounts implode simultaneously when there is a major shock, with the losses magnified by the forced liquidations. Even still, the losses to FTX should be manageable, barring a computer glitch on FTX's part that prevents it from liquidating fast enough.

How much capital should FTX be required to hold? I suggest that it be based on a stress test based on a reasonably extreme scenario. For example, the stress test could be one in which the prices of all underlying assets suddenly jump or fall 5% instantaneously and another 20% in 20 minutes. What would losses look like in this scenario?

Given the real-time margining that FTX is doing, it could even do such a stress test continuously in real time and proactively increase margins when needed.

Clearly, the parameters of the stress tests will need to be refined over time. The CFTC should not delay approval while it ponders the parameters.

<u>FTX internalizes the margin externality and thus has the incentives to get margins right.</u>

Exchanges have a financial incentive to set margins very low in order to maximize the utility of their contracts and thus maximize trading volume and revenue. As default losses are borne first by the FCMs and later by the other guarantors, there is an externality: The DCM/DCO does not bear all of the risk if it sets margins too low, and is therefore more likely to do so.

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[3] See SEC Concept Release, Securities Transactions Settlement, https://www.sec.gov/rules/concept/33-8398.htm, along with Chair Gensler's comments at https://www.sec.gov/news/speech/gensler-global-exchange-fintech-2021-06-09. See also the "Bachmann report", 57 FR 27816.

FTX is proposing to bear all of the risk. This internalizes the externality that the traditional arrangement imposes on the industry. Thus, FTX has the right amount of skin in the game: All of their skin and flesh as well.

FTX Customers should have the same level of protection as FCM customers.

FTX is fulfilling the role not just of the DCO, but also the FCM. It goes without saying that FTX customers should have the same level of consumer protection as FCM customers. This includes sales practice and disclosure rules. However, I am not a big fan of the §1.55 disclosures, as they are mostly legal boilerplate of limited usefulness to most investors. It is important that the §1.55 information be available on the web, but it does little to educate investors on the risks and rewards of futures investing.

It is important that consumers understand the products they are trading. One way to achieve this is for FCMs to have their customers pass a simple online quiz regarding futures before they can trade them. This will make sure that consumers have a better understanding of what they are doing.

The CFTC should support innovation by approving this request.

Our financial markets are great, but there is still lots of room for improvement. Often, the best innovations come from the new entrants. GM did not bring us the electric car, it was Tesla. ATT did not bring us free international calls, it was Skype and WhatsApp. FTX is an innovative firm emerging from the "crypto" space that seeks to offer innovative products. The CFTC should let innovators like FTX experiment with different products by approving this request.

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Respectfully submitted,

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