TESTIMONY OF TERRENCE A. DUFFY CHAIRMAN AND CEO CME GROUP INC. BEFORE THE

House Agriculture Committee

"Changing Market Roles: The FTX Proposal and Trends in New Clearinghouse Models"
May 12, 2022

Chairman Scott, Ranking Member Thompson, and Members of the Committee, I am Terry Duffy, Chairman and CEO of CME Group Inc. ("CME"), the world's leading and most diverse derivatives marketplace. We offer the widest range of global benchmark products across all major asset classes and provide clearing services for our customers around the globe through our clearinghouse, CME Clearing.

Thank you for the opportunity to testify today regarding proposed revisions to the derivatives clearing organization (DCO) registration order of LedgerX, LLC d.b.a. FTX US Derivatives ("FTX") to offer central clearing of margined products directly to retail customers (the "FTX Request" or "FTX Proposal"). This proposal, if approved by the Commodity Futures Trading Commission ("CFTC"), would represent a dramatic change to the market structure of the derivatives industry and would set a precedent with wide-ranging negative implications for the safety and soundness of U.S. financial markets.

FTX's Proposal is glaringly deficient and poses significant risk to market stability and market participants. We believe the implications of this application far exceed the parameters of the typical matters that lay before the CFTC, and we appreciate your interest in considering the numerous pitfalls inherent in the FTX Request. It is imperative that the committee of jurisdiction provides oversight and consideration of this matter. It is of fundamental importance to the effectiveness of the global commodity markets, and I hope that you will give the FTX Request the fullest measure of scrutiny because, as proposed, it promises to usher in a derivatives clearing model rife with risk management deficiencies, market integrity issues, cross border implications, and customer protection issues.

I. Risk Management Deficiencies in the FTX Request

FTX's proposal does not instill the necessary risk management incentives for its participants – it is risk management "light." Under this regime, FTX will not impose any capital requirements on its participants and does not intend to maintain mutualizable participant resources (i.e., loss-sharing among non-defaulting participants) to address participant defaults.

More broadly, FTX's proposal is insufficient, as its direct model eliminates potentially billions of dollars of loss-absorbing resources that are currently a feature of the derivative markets.

A. Elimination of Capital Requirements

FTX's proposed risk management regime has no capital requirements for participants. Today, DCOs maintain strict minimum financial requirements and are backstopped by the FCMs' own capital. FCMs, in the aggregate, maintain over \$173 billion in adjusted net capital and other

resources.¹ There is no indication that FTX would hold capital or residual interest comparable to FCM levels today.

B. Lack of Counterparty Due Diligence

Counterparty due diligence is a linchpin of the modern financial system and a key part of current DCOs' risk management practices, used to confirm that clearing members are well-placed to meet the obligations that arise from their risk-taking. FTX would not be the first party, novice or otherwise, to suggest that financial modeling and algorithm design could eliminate the need for best practices in risk management; however, the eventual fate of Long-term Capital Management² and bespoke financially engineered products, such as mortgage-backed securities and collateralized debt obligations, suggest that it would be folly to unwind core risk management practices based on the assurance that "this time it's different."

C. Insufficient Financial Resources for Managing Participant Defaults

Unsurprisingly given the proposed lack of capital requirements for participants, under FTX's proposal, FTX will have insufficient financial resources to address default events (i.e., tail risk). Additionally, by proposing to self-fund its guaranty fund, FTX eliminates a core incentive for participants to effectively manage their risks. In contrast, current DCOs require clearing members to fund a mutualized pool of resources with knowledge of the risks they assume (in addition to a DCO's own contribution known as, "skin-in-the-game"), so that as risk-taking increases, resources increase. This provides incentives to clearing members to manage their own and their customers' risk in business-as-usual and stressed markets, while also incentivizing them to actively participate in the default management process. Removing the potential for loss mutualization, as FTX proposes, eliminates these risk management incentives.

D. Failure to Use Appropriate Stress Scenarios for Sizing Financial Resources
FTX also does not appear to fully understand the concept of "extreme but plausible market conditions" (emphasis added)³ for the purposes of guaranty fund sizing. Surprisingly, FTX appears to suggest that increasing the assumed number of participants defaulting meets this requirement,⁴ and no other information is provided in the FTX Request on its stress testing

¹ CFTC, Financial Data for FCMs (Feb. 2022) (noting, figure includes adjusted net capital and residual interest for the customer segregated account), available at https://www.cftc.gov/sites/default/files/2022-04/01-%20FCM%20Webpage%20Update%20-%20February%202022.pdf.

² The near-failure of Long-Term Capital Management ("LTCM") and the hedge fund it operated ("LTCM Fund") in the summer and early fall of 1998 vividly highlighted the need for using sound risk management practices in the financial markets. LTCM engaged in highly leveraged trading for the LTCM Fund based on the general strategy that liquidity, credit and volatility spreads would narrow, in a range of financial instruments including derivatives. LTCM relied on risk management models that underestimated the risk that the spreads would widen as they did. By the end of August 1998, the capital held by the LTCM Fund had declined over 50% from the start of the year. The President's Working Group on Financial Markets issued a report in April 1999 identifying the risk management and other failures at LTCM and its counterparties and provided a number of recommendations in the report to enhance risk management practices, including counterparty due diligence. *See* "Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management Report of The President's Working Group on Financial Markets" (April 1999).

³ CFTC Regulation 39.11(a)(1).

⁴ FTX Request, Letter from Julie L. Schoening, Ph.D, Chief Risk Officer, FTX US Derivatives, to Clark Hutchinson, Dir., Div. of Clearing & Risk, at pg. 3 (Feb. 8, 2022) (Financial Resource Requirements under Core Principle B and CFTC Regulation 39.11(a)(1) in the Absence of Clearing Futures Commission Merchants ("FCMs")) (noting, "[i]ncreasing the number of the largest participants that are assumed to default at the same time

methodology. DCOs today size their financial resources using both historical data and hypothetical scenarios that are designed to capture tail risk.⁵ Failing to do this ignores tail risk and leads to inadequate resources to cover default losses, particularly during stressed markets.

II. Market Integrity Jeopardized

The FTX Request, as designed, would have a significant negative impact on market integrity. FTX assumes that auto-liquidation is a panacea that eliminates the need for other risk management practices. FTX is arguing in favor of eliminating best practices in risk management represented by risk-based capital and other participation requirements, counterparty credit due diligence, and participant funded mutualizable resources for managing defaults, among others. This collectively eliminates core incentives for participants to effectively manage their risk-taking.

Contrary to FTX's assertions, auto-liquidation is not a new concept and has not been broadly implemented due to the panoply of problems it creates, particularly in stressed markets. Auto-liquidation may, at first glance, appear to be novel but it has been evaluated and generally dismissed as a market-wide risk management tool for three primary reasons: (1) it risks creating a vicious procyclical cycle of cascading liquidations; (2) it incentivizes market abuse and bad behavior, including but not limited to, market participants triggering and trading against liquidation orders and market participants anticipating and front-running the liquidation orders, exacerbating market volatility and increasing liquidation cost; and (3) at least in the case of the FTX implementation, it closes out participant positions without the ability to cure the collateral shortfall.

Moreover, FTX appears to realize that its proposed auto-liquidation tool and use of backstop liquidity providers may not always be successful. However, rather than proposing additional resources or risk management incentives to address an unsuccessful liquidation, FTX's proposed solution is to tear up positions in a manner similar to what was recently observed in the nickel derivatives market in the UK.

A. Cascading Liquidations

FTX's proposed use of an auto-liquidation algorithm across its entire customer-base could cause widespread market disfunction and price distortions. Often referred to as a "contagion effect" in mass liquidations, the market impact associated with the liquidation of one account can cause the liquidation of other accounts, thus leading to a dysfunctional cycle of cascading account liquidations. Auto-liquidation has historically shown a propensity to exacerbate price moves during volatile markets, leading to cascading liquidations and further market destabilization.⁶

makes a scenario more extreme but naturally decreases the plausibility of such a scenario."), available at https://www.cftc.gov/media/7006/ledgerx dba ftx ltr fin resource req2-8-22/download.

⁵ CFTC Regulation 39.11(c)(1) (noting, CFTC Regulation 39.36(a) establishes additional requirements with respect to a systemically important and electing subpart C DCO's stress testing methodology (e.g., scenarios considered)). ⁶ See CME Group, Notice of Disciplinary Action, COMEX-15-0303-BC (Sept. 2020) (sanctioning firm that utilized functionality designed to automatically liquidate under-margined customer accounts that caused extreme price movements, liquidity and trade volume aberrations and velocity logic events on multiple occasions), available at https://www.cmegroup.com/notices/disciplinary/2020/09/COMEX-15-0303-BC-INTERACTIVE-BROKERS-LLC.html. See also CME Group, Notice of Disciplinary Action CBOT-15-0158-BC (Mar. 2017) (sanctioning firm that utilized an auto-liquidation algorithm to liquidate under-margined client accounts causing significant market disruptions on several dates), available at https://www.cmegroup.com/notices/disciplinary/2017/03/CBOT-15-0158-BC-SAXO-BANK-AS.html.

B. Market Abuse

FTX's proposed use of an auto-liquidation algorithm across its entire customer-base also sets the table for significant abusive practices. FTX's seemingly predictable auto-liquidation algorithm (i.e., X-percent of account liquidated in Y-second intervals) paves the way for predatory order anticipation strategies to front-run or trade ahead of the liquidation, which would have the effect of removing market liquidity and thus impairing the ability of the auto-liquidation algorithm to offset positions without significant price concession. It is also conceivable that sophisticated market participants could earn significant profits triggering and trading against liquidations, particularly during times of low liquidity.

C. Broken Hedges

FTX has expressed its ambition to apply its model to other asset classes. Auto-liquidations could also have knock-on effects on the real economy, including exacerbation of price increases already being observed due to inflationary pressures, if it were utilized in core commodity markets such as agricultural, energy, and metals, as well as other markets. Commodity producers and purchasers often use derivatives markets to hedge their business risks over short-term and long-term time horizons. This has been reflected by the hedge accounting rules which, under certain conditions, allow these participants to benefit from preferential accounting treatment due to the reduced business risk associated with their well-hedged exposures.

FTX propagates a model where participants can be liquidated without notice,⁷ in the middle of the night, and on weekends and holidays, during illiquid market conditions and at discounted prices. Auto-liquidation would inject uncertainty in the application of hedge accounting programs at firms because the risk of sudden broken hedges. Such a break could occur during a market event, or in the case of FTX even without significant market moves, leading to realized and unrealized gains impacting firms' accounting statements at a time when balance sheet stability is more important than ever.

D. Partial Tear-Ups as a Front-Line Risk Management Tool

Under FTX's proposal, innocent, non-defaulting participants may be subject to liquidation if FTX employs the partial tear-up of positions as a front-line risk management tool to manage a default. FTX has the discretion to implement partial tear-up prior to any attempt at liquidation (auto-liquidation or otherwise) or the use of FTX's guaranty fund. Thus, even a participant who deposited significant amounts of collateral in excess of their margin requirement to avoid auto-liquidation may still be subject to having their positions torn-up through no fault of their own.

In other words, FTX has the power to implement a tear-up—similar to recent events in the nickel derivatives markets—in business-as-usual market conditions prior to the implementation of any risk management tools or utilization of any loss-absorbing resources, including those of FTX. This also inherently creates a conflict of interest for FTX, as it could elect to use partial tear-ups in order to avoid losses to its entirely self-funded guaranty fund.

⁷ See proposed FTX Rules 7.1.C.5 and 7.2.D.2.

⁸ See FTX Rulebook at proposed FTX Rule 14.3.

E. Conflicts of Interest Need to be Disclosed and Explained

FTX heralds its use of backstop liquidity providers as a prudent liquidity risk management tool that can be utilized where auto-liquidation fails. FTX does not identify these potential backstop liquidity providers. We can only speculate on who they are and their relationship to FTX. It is worth noting that Alameda Research, which has common ownership with FTX and was originally founded to exploit cross-border crypto arbitrage opportunities, plays a significant role in managing liquidations and providing liquidity in offshore and cash crypto markets. It is important for market stakeholders and the CFTC to investigate these unknowns further in light of the clear conflicts of interest of such a structure.

III. Cross-Border Implications of the FTX Request

Permitting the FTX Request to move forward in its current form could undermine the CFTC's position as a leader in derivatives regulation. The CFTC has long-been at the forefront of promoting best practices in risk management, including through its role in global standard-setting organizations⁹ and the adoption of risk management innovations that have been exported across the globe. The CFTC's potential abdication of this leadership role in the supervision and regulation of U.S. DCOs will have real world consequences for U.S. and global derivatives markets. The CFTC's leadership has helped to ensure that U.S. DCOs can effectively offer their risk management services to participants on a global basis.

IV. Customer Protection Issues in the FTX Request

FTX's proposal eliminates customer protections for all of FTX's participants in margined and fully collateralized products. FTX's proposal discards these carefully crafted customer protections developed by the CFTC over decades without consideration of the rationale underpinning their design. Most notably, the FTX proposal would eliminate regulatory standards designed to protect customer funds. An FCM is subject to stringent customer funds segregation requirements under the CEA and CFTC regulations with respect to holding funds it receives from public customers to guarantee, secure or margin their cleared futures and other derivatives transactions. The predominantly retail market participants that FTX plans to solicit to engage in leveraged futures trading as direct clearing members are the very type of market participants the segregation requirements are intended to protect, and they have a very different profile from institutional market participants that decide for business and other reasons to self-clear their leveraged trades as direct clearing members. However, because retail participants would self-clear their leveraged transactions directly on FTX, the CEA's customer funds segregation regime would not apply. If the segregation requirements do not apply, FTX's retail clearing members will lose the following protections, among others:

- FTX would not be prohibited from using a futures clearing member's funds for any purpose other than to guarantee, margin or secure such person's transactions.
- FTX would not have to hold funds of futures clearing members as customer funds subject to the statutory trust created by CEA Section 4d(b). The custodians that FTX uses likewise would not hold those funds subject to statutory trust.

⁹ The CFTC is a member of IOSCO.

¹⁰ Under FTX's proposal, fully collateralized participants (who lose these customer protections) would be inordinately penalized due to the legislative mandate requiring them to share losses on a pro rata basis with margined participants.

- FTX would not have to open accounts with custodians to hold futures clearing members' funds under account names identifying the accounts as holding property belonging to its customers, nor would FTX have to obtain acknowledgement letters from such custodians as would be required under CFTC Regulation 1.20.
- FTX would not have to use depositories that meet the requirements of CFTC Regulation 1.49 to hold clearing members' funds.
- FTX would not be required to bear sole responsibility for any loss in its investment of clearing members' funds, as it would under CFTC Regulation 1.29 if they were protected segregated funds of an FCM's customers.

Under FTX's proposal, the failure of FTX to provide these protections would not be disclosed to the customers; in fact, new entrants to the futures markets would have no knowledge that these protections exist and that these protections would normally be provided when trading on a futures exchange through the intermediation of FCMs.

V. The FTX Request is Contrary to and Inconsistent with the Commodity Exchange Act
The FTX Request blurs the existing distinctions between an FCM, a DCO, and a DCM and the clear set
of rules and principles applicable to each registrant. If approved by the Commission, FTX will be allowed
to engage in otherwise-regulated FCM activities without the same oversight and supervision that applies
to FCMs. Not only is this counter to the foundational elements of the CEA, but FTX's proposal, if
approved, will create a regulatory gap which will, in fact, lower regulatory standards and protections
provided to retail participants.

A. The FTX Proposal Does Not Represent Responsible Innovation Serving the Public Interest CEA Section 3(b) does not promote innovation in financial markets for the sake of innovation alone; it promotes responsible innovation that serves the public interests described in Section 3(a), namely, innovation that would foster fair, liquid and financially secure markets that businesses rely upon for risk management and price discovery. FTX's Proposal, if allowed and implemented, will harm market integrity, erode customer protections, and inject risk and financial instability into the markets.

Moreover, FTX's purported innovations are neither innovative nor responsible. What, precisely, is innovative or responsible about shifting FCM activities into its DCM and DCO entity to circumvent FCM registration and regulation? This seems more evasive than innovative.

B. The FTX Proposal Would Degrade Existing Regulatory Standards

The CEA's core principles governing a DCO under the CEA – and those of a DCM as well – are no substitute for the myriad of requirements that apply to FCMs under the CEA framework.

While DCOs and DCMs are held to rigorous, comprehensive standards, these standards are designed to work in conjunction with the panoply of requirements applicable to FCMs. The CEA framework does not contemplate that a DCO or DCM would combine solicitation of customers

and their funds to open accounts for leveraged trading with the market operations or clearing functions that they perform.¹¹

In addition, FTX's proposal would result in limiting the recourse available to retail customers if FTX were to engage in fraudulent or abusive business conduct practices with its customers or mishandle customers' funds. The National Futures Association's ("NFA") arbitration and mediation would be unavailable for resolving customer disputes because FTX would not be an FCM member of NFA, nor could customers file a complaint against FTX using NFA's customer complaint process, for the same reason.

Conclusion

Although the CEA does feature innovation as a statutory goal, the Act does not promote innovation for the sake of innovation alone. This means any purported "innovation" which is found to increase risk unacceptably or fails to protect customers, would be in contravention of the purpose of the law.

The FTX Request does not meet this test. FTX proposes to implement a "risk management light" clearing regime. In fact, the purported "innovations" of FTX's proposal are best understood as simple cost-cutting measures. And these cost cutting measures would come at the expense of risk management best practices, market integrity, customer safety, and ultimately, financial stability. It should not be allowed to go forward as proposed. The CFTC should either reject the FTX proposal or commence a formal rulemaking to allow a broader public discussion of appropriate risk management standards.

Thank you. I look forward to answering your questions.

¹¹ Putting aside the fully-collateralized disintermediated DCMs that the Commission has allowed, DCMs – those that provide for market access through the intermediation of FCMs – promote the contracts they list for trading generally to prospective market participants. They do not engage one-on-one with prospective customers to solicit them to open trading accounts, assist them with the customer onboarding process, conduct "know-your-customers" reviews, or otherwise have ongoing day-to-day engagement with customers. Those functions are performed by the FCMs and are material components of the important checks and balances that FCMs provide.



Terrence A. Duffy
Chairman and Chief Executive Officer

Terrence A. Duffy serves as Chairman and Chief Executive Officer of CME Group. He is responsible for overseeing the world's leading and most diverse derivatives marketplace. In 2021, 4.9 billion contracts were traded at CME Group.

Previously, Duffy served as Executive Chairman and President of CME Group since 2012 and as Executive Chairman since 2007. He served as Chairman of the Board of CME and CME Holdings since April 2002 and as Executive Chairman since October 2006. He was Vice Chairman of the Board of CME Holdings Inc. from its formation in August 2001 and of the Board of CME from 1998 to April 2002. He was President of TDA Trading, Inc. from 1981 to 2002. He has been a CME member since 1981 and a Board member since 1995.

Duffy was appointed by President Bush and confirmed by the U.S. Senate in 2003 as a member of the Federal Retirement Thrift Investment Board (FRTIB), a position he held until 2013. The FRTIB administers the Thrift Savings Plan, a tax-deferred defined contribution (retirement savings) plan for federal employees.

During his tenure, Duffy led the first merger in the futures industry, combining the Chicago Board of Trade and the Chicago Mercantile Exchange in 2007 to create CME Group. The following year, he oversaw the acquisition of the New York Mercantile Exchange, adding the world's benchmark energy markets to CME Group. In 2018, he spearheaded the company's acquisition of NEX, which streamlined trading across futures, options, cash and OTC markets. And, in 2021, Duffy embarked on a landmark partnership with Google Cloud to bring expanded access, new products and greater efficiencies to derivatives markets through cloud technology.

Under his leadership, CME Group has received a wide range of industry awards recognizing the exchange, clearing house and product innovation. CME Group has also been recognized as the most valuable exchange brand for the past eight years. Duffy was named CEO of the Year at FOW's 2018 International Awards. He currently serves as Co-Chair of the Mayo Clinic Greater Chicago Leadership Council. He is Vice Chairman of the CME Group Foundation.

He attended the University of Wisconsin-Whitewater and received a Doctor of Public Service, *honoris causa*, from Saint Xavier University in 2019 and a Doctor of Humane Letters from DePaul University in 2007.

Truth in Testimony Disclosure Form

In accordance with Rule XI, clause 2(g)(5)* of the Rules of the House of Representatives, witnesses are asked to disclose the following information. Please complete this form electronically by filling in the provided blanks.

"Changing Market Roles: The FTX Proposal and Trends in New Clearinghouse Models" Witness Name: Terrence A. Duffy Position/Title: Chairman and Chief Executive Officer Witness Type: Governmental Non-governmental Are you representing yourself or an organization? Self Organization If you are representing an organization, please list what entity or entities you are representing: CME Group FOR WITNESSES APPEARING IN A NON-GOVERNMENTAL CAPACITY Please complete the following fields. If necessary, attach additional sheet(s) to provide more information. Are you a fiduciary—including, but not limited to, a director, officer, advisor, or resident agent—of any organization or entity that has an interest in the subject matter of the hearing? If so, please list the name of the organization(s) or entities.	Committee: A	griculture
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(5)(A) Each committee shall, to the greatest extent practicable, require witnesses who appear before it to submit in advance written statements of proposed testimony and to limit their initial presentations to the committee to brief summaries thereof.

- (B) In the case of a witness appearing in a non-governmental capacity, a written statement of proposed testimony shall include—
 (i) a curriculum vitae; (ii) a disclosure of any Federal grants or contracts, or contracts, or payments originating with a foreign government, received during the past 36 months by the witness or by an entity represented by the witness and related to the subject matter of the hearing; and (iii) a disclosure of whether the witness is a fiduciary (including, but not limited to, a director, officer, advisor, or resident agent) of any organization or entity that has an interest in the subject matter of the hearing.
- (C) The disclosure referred to in subdivision (B)(iii) shall include—(i) the amount and source of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) related to the subject matter of the hearing; and (ii) the amount and country of origin of any payment or contract related to the subject matter of the hearing originating with a foreign government.
- (D) Such statements, with appropriate redactions to protect the privacy or security of the witness, shall be made publicly available in electronic form 24 hours before the witness appears to the extent practicable, but not later than one day after the witness appears.

^{*}Rule XI, clause 2(g)(5), of the U.S. House of Representatives provides: