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Full Committee Hearing

on

Crypto Crash: Why Financial System Safeguards Are Needed for Digital Assets
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Witness Biographical and Background Statement

I am Milton R. Underwood Chair, Professor of Law and Associate Dean at Vanderbilt Law School, where I research financial market regulation, securities regulation, and corporate bankruptcy, focusing on market structure, exchange design, digital asset regulation, payments, debt and restructuring. An area of particular specialization is market microstructure, examining the regulation of trading ecosystems for various asset classes, notably, equity, U.S. Treasuries, corporate bonds and cryptocurrencies.

This testimony reflects my own views only. I have not received any federal funds or any compensation for my testimony, and do not speak on behalf of any organization.

Chairman Brown, Ranking Member Scott, Members of the Committee:

Thank you for this opportunity to appear before you today. It is an extraordinary honor and privilege for me.

The urgency of this hearing cannot be overstated. In the course of a single year, the cryptocurrency market has experienced a whipsawing state of crisis – moving from record-high valuations in November 2021 to the collapse of the Terra/Luna ecosystem in May 2022 and, most recently, the chaotic insolvency of FTX and that of other brand-name, crypto-finance firms.¹ We have been asked to speak to the question of why financial system safeguards are needed. This fallout points to a number of reasons. Chiefly, however, it highlights that digital asset markets have become popular, sophisticated, institutionalized, financialized, and interconnected.² Yet the risks within the ecosystem – technological, financial, and legal – remain poorly understood. Importantly, even as innovation advances apace, it does so without stable and clear guardrails that can better ensure that those creating and taking risks are doing so responsibly, with information, and in a way that does not produce disorderly externalities that fall on those least able to bear them. As our agencies and lawmakers continue the hard work of crafting a framework for overseeing digital assets, my remarks below focus on outlining a regulatory solution – a public mandate for self-regulation by cryptocurrency exchanges – that can be up and running rapidly to bring a layer of systematic oversight and standardization to the market. This solution is not a substitute for public regulation, nor is it without its problems. Rather, it seeks to offer a complement to public oversight – and one that can fluidly integrate into a thoughtful, expert and comprehensive system for regulating and overseeing digital assets within our financial system.³

As detailed in this testimony and elaborating on my academic work, the proposal seeks to achieve the following aims:

- To bring crypto-currency exchanges within a systematic public regulatory framework by requiring venues to commit to providing private oversight of their market as self-regulatory organizations (SROs). Such self-regulation is already codified in the law for securities and commodities exchanges. As SROs, crypto-venues would have to demonstrate their organizational capacity to provide oversight; be preemptively incentivized to clean house by improving the quality of internal governance and

¹ See e.g., *Factbox: From BlockFi to Genesis, Crypto Firms Reel from Exposure to FTX*, REUTERS, JAN. 5, 2023. On record high crypto-asset market capitalizations in November 2021, Joanna Ossinger, *Crypto World Hits \$3 Trillion Market Cap as Ether, Bitcoin Gain*, BLOOMBERG, NOV. 8, 2021; On the Terra/Luna collapse, Alexander Osipovich, *Cutting-Edge Crypto Coins Tout Stability. Critics Call Them Dangerous*, WALL ST. J., Apr. 18, 2022 (workings of algorithmic stablecoins and discussing Terra/Luna); Alexander Osipovich & Jiyoung Sohn, Do Kwon's *Crypto Empire Fell in a \$40 Billion Crash. He's Got a New Coin for You*, WALL ST. J., Jun. 22, 2022.

² For the most part, in this testimony, I typically use the terms “digital assets,” “cryptocurrency” and “crypto-assets” interchangeably.

³ I detail and analyze this proposal more fully in, Yesha Yadav, *A Public Mandate For Private Oversight in Cryptocurrency Markets* (Working Paper) (Feb. 2023) (formerly titled, *Toward a Public-Private Oversight Model for Cryptocurrency Markets*).

customer protection systems; and regulators would need to monitor ongoing compliance to ensure that exchanges are performing effectively.

- To create a mechanism of public accountability for crypto-asset trading venues, shifting the tradeoffs against irresponsible risk-taking and governance by making it more expensive to behave in ways contrary to the public interest.
- To have crypto-exchanges use their expertise, reach and resources, and to pay for monitoring their marketplace, reducing the burden on the taxpayer.

A. The Critical Importance of Cryptocurrency Exchanges

As once thriving crypto-firms like FTX have suddenly collapsed or fallen into distress, the pain is being felt most viscerally by everyday customers. They are confronting lengthy, complex, expensive, and uncertain legal processes in a bid to recover their assets.⁴ These customers represent everyday people – as well as institutions. According to one December 2022 survey examining five million active checking account customers, around 15% of individuals in the United States were estimated to have transacted in some crypto, up from a “tiny fraction” of the population just five years prior.⁵ Crypto-assets have proven to be especially appealing to minority Americans, with approximately 25% of Black Americans owing some at the start of 2022, compared to 15% of White Americans. For Black Americans under 40 years of age, this figure stood at 38% relative to 29% of White Americans.⁶ Institutions, too, represent a key user base for an increasingly sophisticated and financializing crypto-ecosystem. FTX’s largest 50 creditors are owed a total of more than \$3 billion – ten of these creditors have more than \$100 million each locked-up on the venue as part of FTX’s bankruptcy proceedings, with two owed more than \$200 million each.⁷

Cryptocurrency exchanges have played an essential part in this popularization. At around the market’s peak in December 2021, exchange trading volumes globally stood at approximately \$14 trillion for the year – a reported increase of 689% from 2020 figures.⁸ To be sure, exchange trading volumes have tumbled alongside the fortunes of the crypto-market and the collapse of FTX.⁹ But everyday trading volumes do not come close to conveying the anchoring significance of exchanges for the crypto-ecosystem. By offering users a convenient, usable, and often exciting trading environment, exchanges have built an easy on-ramp into cryptocurrencies for retail as well as

⁴ Andrew Scurria & Soma Biswas, *FTX Collapses Into Bankruptcy System That Still Hasn’t Figured Out Crypto*, WALL ST. J., NOV. 16, 2022.

⁵ JP Morgan Chase Research, *The Dynamics and Demographics of U.S. Household Crypto-Asset Use*, <https://www.jpmorganchase.com/institute/research/financial-markets/dynamics-demographics-us-household-crypto-asset-cryptocurrency-use> (Dec. 2022).

⁶ Charles Schwab, *Ariel-Schwab Black Investor Survey*, <https://www.schwabmoneywise.com/tools-resources/ariel-schwab-survey-2022> (2022). On record

⁷ Joshua Oliver & Sujeet Indap, *FTX Businesses Owe More than \$3bn to Largest Creditors*, FIN. TIMES, NOV. 20, 2022.

⁸ Yogita Khatri, *Centralized Crypto Exchanges Saw over \$14 Trillion in Trading Volume This Year*, THE BLOCK, DEC. 24, 2021 (these figures reference trading volumes on centralized trading venues).

⁹ Vildana Hajric and Olga Kharif, *‘Spectacular’ Trading Drop Plagues Still-Reeling Crypto Market*, BLOOMBERG, JAN. 7, 2023.

institutional users. Notably, exchanges facilitate access and overcome frictions for those daunted by transacting on blockchains, being responsible for self-custody of crypto assets, worried about lengthy settlement times, or paying potentially high fees.¹⁰ Major exchanges often provide one-stop-shops for crypto-trading.¹¹ In addition to matching buyers with sellers, they offer crypto-custody, maintaining user passwords (or keys) to move value rapidly between accounts. This allows exchanges to provide virtually instantaneous settlement: as soon as a trade is matched, the exchange's own internal ledger updates user credit and debit balances. In other words, the action takes place "off-chain" – and settlement on public blockchains becomes unnecessary for real-time trading.¹² In addition, exchanges also offer users a suite of commercial products, like margin loans, general loans, credit cards, as well as various types of crypto-rewards programs, some of which have come in for regulatory scrutiny recently.¹³ As exemplified by FTX, Alameda Research and FTX Ventures, some venues also constitute critical financiers within the larger crypto-economy, funding venture capital and other types of investment across the crypto-economy.¹⁴

Notwithstanding the cryptocurrency market's adherence to notions of decentralization, then, its key pillars – the exchanges – constitute highly centralized institutions – indeed, to a far deeper degree than more traditional counterparts like the New York Stock Exchange (NYSE) or Nasdaq. But despite their importance for the crypto-economy, people, and institutions, regulation has so far failed to provide a comprehensive framework for their oversight. Outside of discrete contexts (like payments), cryptocurrency exchanges have grown in size, stature, and organizational complexity largely absent the guardrails that could be provided by a comprehensive federal system of regulation.¹⁵ As our agencies debate what legal categories cryptocurrencies fall into – whether these constitute securities, commodities, or some other classification – a lack of clarity on threshold determinations of which regulatory body has jurisdiction, and on what legal grounds, mean that the work of crafting oversight for crypto-exchanges remains a work-in-progress.¹⁶

¹⁰ David Easley & Maureen O'Hara, *From Mining to Markets: The Evolution of Bitcoin Transaction Fees*, 134 J. FIN. ECON. 91 (2019) (detailing the need for fees to be included in the context of transactions on the Bitcoin blockchain).

¹¹ Kristin Johnson, *Decentralized Finance: Regulating Cryptocurrency Exchanges*, 62 WM. & MARY L. REV. 1911, 1953-1955 (2021) (detailing the various trading functions performed by centralized cryptocurrency exchanges).

¹² Blockchain-based transfers are needed in some cases, notably, where crypto is moved off the exchange and to a user's personal wallet.

¹³ Ephrat Livni, *S.E.C. Charges Crypto Companies With Offering Unregistered Securities*, N.Y. TIMES, JAN. 12, 2022; Andrew Ross Sorkin et al., *The S.E.C. Signals a Crackdown on Another Crypto Practice*, N.Y. TIMES, FEB. 10, 2023.

¹⁴ Joshua Oliver, Nikou Asgari & Kadhim Shubber, *FTX: Inside the Crypto Exchange that 'Accidentally' Lost \$8bn*, FIN. TIMES, NOV. 18, 2022.

¹⁵ Exchanges are generally regulated as money transmission businesses and subject to licensing requirements at the state-level. At the federal level, such businesses are thus regulated to ensure compliance with laws against money laundering and illicit financing. In addition, and importantly, the states of New York and Wyoming provide licensing regimes for digital asset businesses and platforms. The New York State Department of Financial Services, for example, operates a regime for a "Bitlicense" that can supervise companies providing, for example, trading and custody services for digital assets. For discussion, Adam Levitin, *Not Your Keys, Not Your Coins: Unpriced Risk in Cryptocurrency*, TEXAS L. REV. (forthcoming), 8-9, 62-66. For discussions of state money transmission frameworks, including analysis how these are "antiquated" and not well-adapted to meet the firm structures and risks created by large-scale, tech payment services providers see, Dan Awrey, *Bad Money*, 106 CORNELL L. REV. 1 (2020).

¹⁶ See also, Chris Brummer, Testimony Before the Agriculture Committee, U.S. House of Representatives Subcommittee on Commodity Exchanges, Energy, and Credit The Future of Digital Asset Regulation (Jun. 23, 2022)

Yet as the collapse of FTX demonstrates, weak or limited guardrails on major crypto-exchanges risk leaving customers and the marketplace vulnerable to suffering heavy losses.¹⁷ By now, the extent of FTX's abysmal governance and risk management is fairly well-known. \$8 billion in customer money looks to be lost, possibly stolen.¹⁸ It ranks as *the worst* example of corporate mismanagement ever witnessed by current FTX-CEO, Mr. John Ray III, during a 40-year career as a restructuring expert that spans overseeing the fallout from the egregious fraud and self-dealing seen at Enron. With billions of dollars of capital locked and loans unable to be repaid, other companies have fallen into their own states of distress following FTX's bankruptcy. BlockFi and Genesis Global Capital, for example, have cited the resulting post-FTX cash crunch on their own books as a trigger for their own Chapter 11 petitions.¹⁹ But FTX is not the only exchange to have found itself treading troubled waters. Other top crypto-exchanges have faced a variety of difficulties and reputational costs, from heavy withdrawal requests, outages, to penalties for failures to implement robust money laundering controls.²⁰ The Securities and Exchange Commission (SEC) has recently pursued enforcement actions against two major venues for alleged violations of securities laws.²¹

The absence of a comprehensive federal oversight framework means that decisions with respect to proper exchange structure, customer protection norms, risk compliance and corporate governance are being taken *ex post* in litigation by the Bankruptcy Court, or by way of enforcement actions. For example, instead of expert, technically savvy rulemaking clearly setting out how customer crypto-assets ought to be looked after before the fact, customers must now wait for the Bankruptcy Court to rule whether customer assets constitute the property of debtor's estate in bankruptcy or whether they belong to the customer. But such consequential determinations will ultimately come too late, with losses already incurred and the reputation of the industry as well as the regulatory system tarnished. In other words, policymakers too must contend with damaged confidence and expectation for more from the American public. According to one survey of Black cryptocurrency

(noting the for example, the need for thoughtful disclosures adapted to reflect the unique technological risks posed by digital asset offerings),

¹⁷ To be clear, FTX was regulated and organized under the laws of the Bahamas, including under the provisions of the Digital Assets and Registered Exchanges Act 2020 (DARE). However, commentators have raised concerns regarding the robustness of this framework and whether oversight was sufficiently comprehensive. For example, Bahamas' regulators did not have full sight of all the entities involved, including activities relating to Alameda Research. Katanga Johnson & Jim Wyss, *One of FTX's Biggest Victims Could Be the Bahamas' Finance Reputation*, BLOOMBERG, JAN. 19, 2023.

¹⁸ Joshua Oliver, Nikou Asgari & Kadhim Shubber, *FTX: Inside the Crypto Exchange that 'Accidentally' Lost \$8bn*, FIN. TIMES, NOV. 18, 2022.

¹⁹ BUSINESSWIRE, *BlockFi Commences Restructuring Proceeding to Stabilize Business and Maximize Value for all Clients and Stakeholders*, Nov. 28, 2022, <https://www.businesswire.com/news/home/20221128005451/en/BlockFi-Commences-Restructuring-Proceeding-to-Stabilize-Business-and-Maximize-Value-for-all-Clients-and-Stakeholders>; Genesis Global Capital, *Genesis Initiates Process to Achieve Global Resolution to Maximize Value for All Clients and Stakeholders and Strengthen Its Business for the Future*, Jan. 19, 2023, <https://genestrading.com/press-releases/genesis-initiates-process-to-achieve-global-resolution-to-maximize-value-for-all-clients-and-stakeholders-and-strengthen-its-business-for-the-future>; Vicky Ge Huang, Caitlin Ostroff, & Akiko Matsuda, *Crypto Lender Genesis Files for Bankruptcy, Ensnared by FTX Collapse*, WALL ST. J., JAN. 23, 2023.

²⁰ Menqi Sun, *Crypto Exchange Kraken Settles Alleged Sanctions Violations*, WALL ST. J., NOV. 29, 2022; Russell Brandom, *Coinbase Experiencing Major Outage as Crypto Prices Plummet*, THEVERGE, May 12, 2022.

²¹ Livni, *supra* note [13]; Sorkin et al., *supra* note [13].

customers, for example, 30% of those responding believed that crypto was regulated by the government. 51% of Black Americans under-40 years of age stated they thought that crypto was safe, with 41% of respondents thinking that the government already regulated the industry.²²

B. A Public Mandate for Private Self-Regulation

Policy must reconcile two issues quickly. One, cryptocurrency exchanges have become popular, financially significant, complex, and interconnected institutions with the capacity to convene large numbers of crypto-customers, professional traders, crypto-ventures, and a diverse range of other stakeholders (like equity investors).²³ Actions taken by crypto-exchanges can create externalities for the larger crypto-system. How customer crypto-assets are held, for example, the technological safeguards by which these assets are protected, or the wording in the terms of service reflecting these arrangements, determine whether customers are at risk of losing their rights in property, or seeing their assets dissipated through co-mingling, hacks and thefts.²⁴ And two, exchanges mostly lack a comprehensive federal system of oversight that can offer a reliable set of guardrails, regulatory clarity and assurance about their capacity to make good on their promises to customers and others. These two factors leave platforms relatively unconstrained to adopt privately beneficial, experimental organizational practices, even if these result in firm structures and habits that heighten the risks facing customers and counterparties.

In my [academic work](#), I advocate for the creation of a public mandate for private self-regulation, where cryptocurrency exchanges, as self-regulatory organizations (SROs), are tasked by regulators to write rules for, supervise as well as discipline the marketplace.²⁵ This proposal has three goals:

- First, it seeks to encourage the rapid creation of a layer of oversight for the crypto-market, even as federal regulators work to develop a detailed and comprehensive framework.
- Secondly, it aims to make industry assume the costs for its own self-protection, harnessing their expertise, reach, and resources to the task, and making them accountable for lapses in performing effectively.
- Thirdly, the mandate seeks to make an aspiring crypto-SRO clean house. To show that they can perform effectively, an aspiring SRO would have to satisfy regulators of their

²² Charles Schwab, *supra* note [6].

²³ For example, FTX has filed its Chapter 11 claim with an estimated nine million possible creditors. Noele Illien, Tom Wilson and Dietrich Knauth, *FTX Opposes New Bankruptcy Investigation As It Probes Bankman-Fried Connections*, REUTERS, JAN. 26, 2023.

²⁴ Multiple exchanges have suffered hacks and thefts owing to sub-optimal asset custody arrangements. In the case of Canada's once largest crypto-exchange, Quadriga, the passwords were held on the laptop of the founder, who suddenly died in murky circumstances, in sole custody of over \$100 million in customer funds. Doug Alexander, *Quadriga Downfall Stemmed from Founder's Fraud, Regulators Find*, BLOOMBERG, JUN. 11, 2020.

²⁵ Yadav, *supra* note [3].

organizational capacity, internal compliance, risk management, and their processes for monitoring customer activities and assets.²⁶

Importantly, this proposal is envisioned as representing but one component within the larger regulatory framework for crypto-assets. It is categorically not a substitute for thorough public oversight – but a complement, designed to mobilize both public and private expertise to regulate a technically complex, novel, innovative and risky asset class.

1. Why Self-Regulation for Crypto-Exchanges?

Self-regulation by financial exchanges is deeply established in U.S. capital markets. Dating back to the earliest days of the Republic, the originating brokers forming the beginnings of what would one day become the NYSE convened to create trading standards, monitoring compliance and punishing those that strayed from group norms. Allowing participants to transact on known terms, parties could avoid haggling over each contract, seeing that it would be honored and using their own idiosyncratic judgments to make good on the bargain. On account of the exchange taking on the role of rule-setter, monitor, and disciplinarian, contracting parties could count on a more standardized trading experience, laying the groundwork for the creation of liquid and informationally efficient markets.²⁷ Self-regulation further sought to elevate the overall quality of the market. Prohibitions against manipulation, for instance, worked to build confidence in the integrity of the nascent market, and to nudge traders to start trusting one another.²⁸ In commodities markets, too, so-called Boards of Trade – like the Chicago Board of Trade – developed standardizing conditions according to which commodities could be widely traded, covering such matters like specifying the conditions of the goods themselves, through grading and inspections.²⁹

Today, self-regulation is codified within the law. Section 6 of the Securities Exchange Act 1934, for example, requires national exchanges to maintain a marketplace that is free of fraud and manipulation, is fair and equitable and works to protect investors and the public interest.³⁰ When applying to become a national exchange, applicants must prove to the SEC that their organization is capable of carrying out effective self-regulation, producing standards and rules, monitoring as

²⁶Proposals for crypto-self-regulation have also been advanced in different forms by legislators and policy experts. Notably, the draft Responsible Financial Innovation Act, advanced on a bipartisan basis by Senators Lummis and Gillibrand, includes provision for the CFTC and the SEC to explore and report on the creation of an SRO framework for the digital asset industry. In addition, former CFTC Chair, Timothy Massad and Professor Howell Jackson have proposed the creation of a joint SEC/CFTC SRO body, akin to FINRA, that could work to oversee the crypto-industry. For discussion of the Responsible Financial Innovation Act, see e.g., Sen. Kirsten Gillibrand, *Lummis, Gillibrand Introduce Landmark Legislation To Create Regulatory Framework For Digital Assets*, Press Release, Jun. 7, 2022, <https://www.gillibrand.senate.gov/news/press/release/-lummis-gillibrand-introduce-landmark-legislation-to-create-regulatory-framework-for-digital-assets/>; See also, Timothy Massad & Howell Jackson, *Self-Regulation Could Cut Through Crypto Quagmire*, Dec. 15, 2022, <https://www.omfif.org/2022/12/self-regulation-could-cut-through-crypto-quagmire/>.

²⁷ Paul Mahoney, *The Exchange as Regulator*, 83 VA. L. REV. 1453, 1459-1462 (1997).

²⁸ Mahoney, *supra* note [27], 1459-1462 (1997); For detailed discussion, Yadav, *supra* note [3], Part II.

²⁹ See for example, Joseph Santos, *A History of Futures Trading in the United States*, *EH.Net*, <https://eh.net/encyclopedia/a-history-of-futures-trading-in-the-united-states/>.

³⁰15 U.S.C. 78f.

well as compelling enforcement from members and users.³¹ This means that regulators must first satisfy themselves that an applicant organization is well-governed, houses experience and expertise, and wields financial and operational resources to perform the task of protecting complex, electronic markets.³² Indeed, even more lightly regulated venues – Alternative Trading Systems (ATS) – designed to provide much more flexible trading ecosystems – are still subject to implementing core standards of fairness, transparency, honesty and integrity on their venue.³³ Taken as a whole, exchanges and ATS that fall short in discharging their duties can be sanctioned publicly, forced to pay penalties as well as face reputational damage.³⁴

To be sure, self-regulation is not a perfect system – far from it. It is rife with conflicts of interest, where for-profit exchanges police their own members and clients.³⁵ Major exchanges are powerful, essential actors and may not always be punished strictly. But despite these flaws, the SRO model has grown deep roots within U.S. markets, where industry is made responsible and accountable for the task of protecting its own marketplace within a larger framework of regulation.

This proposal thus seeks to create simple alignment between cryptocurrency and traditional markets. I believe this alignment would achieve several advantages, creating positive externalities from the perspective of both exchanges and regulators.

- Crypto-exchanges would come within federal regulation systematically. To designate an SRO, authorities would first have to vet a firm for its capacity to perform oversight.
- This vetting would mean that regulators would have to carefully check a firm’s internal governance, risk management, legal and compliance, technical architecture for surveillance, customer monitoring, and systems for protecting customer assets. Recognizing the various governance failures at FTX, as well as a lack of organizational transparency at many major crypto-exchanges, such vetting can mitigate the risks of non-standard, opaque, risk-tolerant and weak controls.
- Industry will gain motivation to preemptively clean house. Before it appears before a regulator, it makes sense for a venue to take steps to improve the quality of its governance, for example, by taking measures like hiring professionals such as legal and compliance staff, switching to industry-accepted accounting and auditing (e.g., GAAP), putting in place high-quality technology to protect customer assets, deploying dedicated units for

³¹ 15 U.S.C. 78f(b) and 15 U.S.C. 78s(a).

³² See e.g., Sec. & Exch. Comm’n, *In the Matter of the Application of Investors’ Exchange, LLC for Registration as a National Securities Exchange*, Release No. 34-78101 (Jun. 16, 2016).

³³ Keri Geiger & Sam Mamudi, *Barclays, Credit Suisse Agree to Dark Pools Settlements*, BLOOMBERG, Jan. 31, 2016; Sec & Exch. Comm’n, *SEC Adopts Rules to Enhance Transparency and Oversight of Alternative Trading Systems*, <https://www.sec.gov/news/press-release/2018-136>.

³⁴ See e.g., Sec. & Exch. Comm’n, *SEC Charges NYSE, NYSE ARCA, and NYSE MKT for Repeated Failures to Operate in Accordance with Exchange Rules*, Press Release, May 1, 2014, <https://www.sec.gov/news/press-release/2014-87>.

³⁵ See e.g., Jonathan Macey & Maureen O’Hara, *From Markets to Venues: Securities Regulation in an Evolving World*, 58 STAN. L. REV. 563 (2005).

conducting surveillance and enforcement, and ensuring financial solvency and organizational resiliency. Well before an application is made, a would-be crypto-exchange can start to behave in a safer way, bringing benefits to itself, customers and the market.

- Industry standard-setting and rulemaking can be informed by expertise being shared between public regulators and crypto-exchange SROs. This can help make new rules more responsive and adapted to the specific characteristics of the crypto-market. For example, rulemaking that protects client assets in traditional securities markets will likely need to be adapted to account for the specifics of how crypto-assets are held and trades cleared and settled off-chain.³⁶ Rules relating to disclosure (e.g., of new token listings) can gain from reflecting the importance of technological risks inherent to crypto-tokens, applications, and blockchains.³⁷ In this way, public regulators can take advantage of the technical proximity enjoyed by major crypto-exchanges to gain insight into the latest shifts in technology and the risks/benefits involved. This can help tailor rulemaking more thoughtfully to crypto, promoting fit and meaningful compliance. Crypto-exchanges too can gain from this dialogue. Regular engagement with regulators can help build a more systematic focus on compliance and risk management as core part of a maturing industry culture.
- Venues are responsible for their failures to meet the standard expected of an SRO, creating public accountability. This prospect of public punishment changes the cost-benefit trade-off crypto-exchanges face when deciding whether to pursue risky activities or to cooperate with peers and regulators in delivering sound governance. Without an SRO regime in place, risk-taking and non-cooperation are much cheaper. The chances of being caught and sanctioned are more remote where rules either do not exist or supervisory levers are ineffectual. Disciplinary mechanisms might look to dispersed customers to bring lawsuits or act on social media. But such processes can be inefficient and ultimately *ad hoc*.
- Regular dialogue, rules clarity, and transparency can also help promote conditions that prevent industry from surprise enforcement actions or unanticipated rulemaking. Where SROs are continually in conversation with regulators, they can engage early on whether certain financial products or marketing strategies may be desirable, potentially helping to steer firms away preemptively from actions that could result in punishment.

2. *Some Considerations for Implementing the Mandate*

Establishing a mandate for self-regulation within the cryptocurrency market will require careful, difficult work from federal regulators as well as prospective SROs. However, a key goal here lies

³⁶ 17 C.F.R. sec. 240.15c3-3.

³⁷ Chris Brummer, *Disclosure, Dapps & De-Fi*, Working Paper, 2-4 (Mar. 24, 2022); Chris Brummer, Jai Massari & Trevor Kiviati, *What Should be Disclosed in an ICO?* CRYPTO-ASSETS: LEGAL, REGULATORY & MONETARY PERSPECTIVES, 157-202 (2019).

in progressing this work rapidly in a bid to catch up with an industry that is already well-evolved and growing in complexity, sophistication, and financialization.

I am hopeful that the process of drafting and passing a specific mandate for crypto-exchange self-regulation can progress efficiently. In particular, threshold definitional questions perplexing agencies need not be addressed in this context. The requirement for SRO status could attach to venues seeking to intermediate trading in *digital assets*. In deploying the nomenclature of *digital assets* generally, debates surrounding the legal categories for crypto-tokens (e.g., securities vs. commodities) need not be resolved in this case. Crucially, even though the SEC and Commodity Futures Trading Commission (CFTC) have been vigorously debating their spheres of jurisdictional authority to oversee crypto, they have already agreed on a joint definition for *digital assets* for the purposes of certain discrete proposed rulemaking.³⁸ By relying on this already-agreed upon definition, both agencies might consider establishing a joint panel for licensing and supervising new SROs, recognizing the experience that each agency possesses in overseeing exchange self-regulation.³⁹ Wheels need not be reinvented. Extensive expertise already housed within each agency to deal with designation, vetting, monitoring, inspection and dialogue can provide a starting point for a framework to set-up industry self-regulation quickly for digital asset markets.

There are further complexities to consider. A fuller discussion of issues is set out in my Article. However, two points are worth raising when considering the design of an SRO-mandate within the cryptocurrency market.

First, the ecosystem includes both centralized exchanges as well as venues that seek to operate in a more decentralized way, using smart contracts, automated market making and self-custody, instead of central limit order books and exchange custody of customer assets. Decentralized platforms lack the mass-market appeal of centralized crypto-exchanges. However, they have acquired popularity in the wake of FTX's failures, with new customers looking to opt-into a trading system where they can take care of their own funds and use applications that look to operate transparently on public blockchains.⁴⁰

Engaging decentralized platforms within self-governance presents a challenge. But it is not an insurmountable one. For one, the traditional market includes different categories of platform subject to different degrees of compliance. National securities exchanges are subject to the fullest set of requirements to ensure self-regulation across the market. By contrast, smaller ATS, come under a more permissive regime, tasked with fewer requirements, but still mandated to disclose their workings and to ensure compliance with basic standards of honesty, fairness and transparency. Similarly, a self-regulatory regime for cryptocurrencies could include a two-tier

³⁸ Sec. & Exch. Comm'n, *Form PF; Reporting Requirements for All Filers and Large Hedge Fund Advisers*, 17 CFR Parts 275 and 279 (Aug. 10, 2022).

³⁹ See also, Massad & Jackson, *supra* note [26] (proposing joint SEC/CFTC action to create an SRO).

⁴⁰ See e.g., Michael Boyle, *FTX Collapse Will Spur Move to Decentralized Exchanges, Franklin's CEO Says*, BLOOMBERG, Nov. 17, 2022.

model, whereby the major centralized exchanges apply for full designation. Meanwhile, smaller, lower-volume, decentralized venues could adhere to a tailored ATS classification.

Secondly, crypto-exchanges have evolved within a highly centralized organizational model. The case of FTX, for example, revealed an exchange operating across 130+ entities, with its own private investment fund and market maker (Alameda Research), alongside a venture capital arm (FTX Ventures), and a platform that provided pre-trade, trading, custody, clearing and settlement.⁴¹ This structure raises troubling concerns about thickly embedded conflicts of interest, concentrated platform risk, information leakage, alongside the danger of client assets being used across multiple units. A key question for policymakers seeking to designate an SRO, lies in deciding how to address the current structural model adopted by many top exchanges and how to reform this model to make it more conducive to the exercise of oversight. As discussed more fully in my Article, some options to consider can include:

- Outright prohibitions on exchanges offering certain services – such as market making, where an exchange or related entities take the other side of a trade against customers. As shown by FTX’s reliance on Alameda Research as a market maker, customers face the risk of being front-run by an in-house entity’s superior information. In addition, an exchange market-maker may get to trade on preferential terms. This raises the risk that an exchange SRO might overlook infractions by its own market-maker or fail to sanction practices like front-running that benefit its in-house trader.
- Structural separation of key units – reforms could look to separate out the main units of an exchange to ensure strong walls between different functions. Entities are separately capitalized, staffed, and adhere to prohibitions on information sharing. This model of entity separation has been used for more traditional investment firms and in exchanges – like the NYSE – for example, where the NYSE has hived off its regulatory functions from its trading and commercial arms to better safeguard due process.⁴²
- Using disclosure to build transparency and awareness of risks – such a technique looks to warning customers of the risks of centralization, conflicts, and platform default. It might be used alongside other options or provide the main way in which risks are controlled. Such a method is lighter touch and depends on customers and others being diligent about reading warnings and understanding their significance.⁴³

C. Conclusion

⁴¹ FTX Trading, *Voluntary Petition for Non-Individuals Filing for Bankruptcy*, Case 22-11068-JTD (Nov. 11, 2022); In Re FTX Trading Ltd., *Declaration of John Ray III in Support of Chapter 11 Petitions and First Day Pleadings*, Case No. 22-11068 (JTD) (Nov. 17, 2022).

⁴² NYSE, NYSE REGULATION, <https://www.nyse.com/regulation>.

⁴³ See e.g., Brummer, *supra* note [37].

Applying the old adage to never let a good crisis go to waste, this current moment in financial markets regulation offers a unique opportunity to develop a thoughtful, robust and protective framework of rules and standards to address the risks and opportunities of digital asset innovation. FTX has shown us – in appalling ways – what can go wrong when the guardrails are missing and who bears the costs when the party stops. Recognizing the work underway to develop a plan for regulation, I have sought to describe a proposal that looks to the most system critical of institutions within the crypto-market – the exchanges – to play a committed and meaningful role in its oversight, and in doing to, to ensure the integrity of their own internal governance. Opting into an SRO model gives industry a chance to take advantage of this crisis, to engage in reform, mature, and to innovate, not just on technology but also on how to create a safer market that does not repeatedly crush the confidence and enthusiasm of its cheerleaders, customers and stakeholders.

Importantly, private exchange self-regulation forms just one part of a robust and comprehensive public regulatory framework for cryptocurrency markets. Much more is clearly needed. As digital innovation grows more complex, sophisticated, and connected to the wider market, we cannot be left behind to wonder yet again what we could have done differently if the next FTX comes along.

Thank you so much for this opportunity to speak before you today. I look forward to responding to your questions.