

April 18, 2022

Submitted via e-mail to: rule-comments@sec.gov

Vanessa Countryman, Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-0609

Re: Amendments to Exchange Act Rule 3b-16 Regarding the Definition of “Exchange”; Regulation ATS for ATSs That Trade U.S. Government Securities, NMS Stocks, and Other Securities; Regulation SCI for ATSs That Trade U.S. Treasury Securities and Agency Securities (Release No. 34-94062; File Number S7-02-22)

Dear Ms. Countryman,

LeXpunK¹ appreciates the opportunity to comment on the Securities and Exchange Commission’s (the “Commission”) proposed rule (the “Proposing Release”)² regarding amendments to the definition of “exchange” under Rule 13b-16 of the Securities Exchange Act of 1934 (the “Exchange Act”), changes to Regulation ATS, and certain other regulations relating to alternative trading systems (“ATSs”). The Proposing Release builds on, and in meaningful ways extends beyond, the Commission’s 2020 proposed rule and concept release (the “2020 Release”),³ the purpose of which was to enhance transparency and oversight of ATSs and electronic trading platforms for U.S.-government and other fixed-income securities. We thank the Commissioners, the Commission staff, and the staff members of the other regulatory agencies who consulted with the Commission on the Proposing Release for their rulemaking efforts and for endeavoring to manage a multitude of interests.

I. OVERVIEW

While the Proposing Release covers extensive ground, our comments focus on the inclusion of a revised and significantly expanded definition of “exchange” under Rule 3b-16 of the Exchange Act. The proposal seeks to include “communication protocol systems” within the regulatory framework applicable to securities exchanges and represents a fundamental, expansive reimagining of an “exchange” under the securities laws. Despite no reference in the Proposing Release to decentralized finance (“DeFi”), digital assets, or related technologies, such sweeping changes will undoubtedly capture digital asset platforms

¹ LeXpunK is a builder-centric movement focused on DeFi advocacy through a number of avenues, each pursued in parallel. LeXpunK directs its efforts at (i) formulating and advocating for the development of clear and well-tailored policies and regulation that advance best practices in DeFi while protecting the values of openness, transparency, and decentralization; (ii) developing model legal standards and structures; and (iii) constructing best practices as well as crypto native solutions (self-help and self-regulatory practices). LeXpunK is founded on the belief that lawyers have both a role and duty to contribute to the open source movement as it is incumbent upon us all as members of builder-communities to be active in shaping narratives and advocating for smart policy outcomes. LeXpunK is supported with grant funding from the Yearn, Curve and Lido protocols.

² Amendments Regarding the Definition of “Exchange” and Alternative Trading Systems (ATSs) That Trade U.S. Treasury and Agency Securities, National Market System (NMS) Stocks, and Other Securities, Securities Exchange Act Release No. 34-94062, 87 Fed. Reg. 15496 (Mar. 18, 2022), <https://www.govinfo.gov/content/pkg/FR-2022-03-18/pdf/2022-01975.pdf>.

³ See Regulation ATS for ATSs that Trade U.S. Government Securities, NMS Stock, and Other Securities; Regulation SCI for ATSs that Trade U.S. Treasury Securities and Agency Securities; and Electronic Corporate Bond and Municipal Securities Markets, Release No. 34-90019 (Sept. 28, 2020), <https://www.sec.gov/rules/proposed/2020/34-90019.pdf> (the “2020 Release”).

within the Commission’s assumed regulatory ambit.⁴ We find the Proposing Release to be a stark departure from the 2020 Release, which was focused on capturing indications of interest networks for fixed income securities. While an expansion of the exchange definition to certain aspects of such markets may better facilitate the Commission’s regulation of those markets, the associated definitional interpretive issues arising from such expansion on other markets have not been fully addressed.

The Proposing Release would give the Commission broad authority to regulate individuals and organizations, including technologists with neither the resources nor the reasonable expectation of being so regulated, who “make available” peer-to-peer “communication protocols” used in DeFi. These actors and the systems they create are not, and cannot feasibly become, regulated securities exchanges, intermediaries, or ATSs. To the extent that such an expansive definition is the goal of the Commission, capturing those industry participants represents a significant expansion of powers that would be inconsistent with the intent of exchange regulation under the Exchange Act.

We and other participants in the DeFi community⁵ were alarmed that the Commission would propose such fundamental changes to the regulatory regime applicable to securities exchanges without first undertaking to engage the communities and stakeholders that would be significantly impacted by such changes. Despite the Commission’s aggressive rulemaking efforts, the Commission has not properly contemplated the impacts on the parties that are both the least prepared for and would be most impacted by these proposed changes, nor is the Commission endeavoring to do so as part of the rulemaking process set forth in the Proposing Release.⁶

Moreover, we are concerned that the Commission’s ongoing failure to conduct a proper impact analysis regarding the rule changes may subject actions by the Commission to enforce alleged violations of these rules to “arbitrary and capricious” claims under the Administrative Procedures Act (the “APA”).^{7,8} The uncertainty of operating under the prospect of such enforcement actions will stifle innovation and the costs

⁴ We note that where digital asset transactions do not involve securities, U.S. securities laws (and the instant proposed rulemaking) would be inapplicable. In light of the lack of clarity with respect to the Commission’s classification of digital assets and transactions involving digital assets, however, there remains a looming uncertainty as to whether the same would be regarded as securities and securities transactions, respectively.

⁵ See Comments on Amendments to Exchange Act Rule 3b-16 Regarding the Definition of “Exchange”; Regulation ATS for ATSs That Trade U.S. Government Securities, NMS Stocks, and Other Securities; Regulation SCI for ATSs That Trade U.S. Treasury Securities and Agency Securities, Release No. 34-94062, <https://www.sec.gov/comments/s7-02-22/s70222.htm> (the “Proposed Release Comments”); see also Dissenting Statement on the Proposal to Amend Regulation ATS, Commissioner Hester M. Peirce, Jan. 26, 2022, <https://www.sec.gov/news/statement/peirce-ats-20220126> (“Unexpectedly for me—and perhaps for many in the market—this proposed amendment goes far beyond the scope of the concept release that was issued with the initial September 2020 proposal. What the staff is recommending for our consideration today is an expansion in the definition of exchange that would apply to any trading venue, including so-called communication protocol systems, for any type of security, not just for government or fixed-income securities.”).

⁶ While the focus of this letter is on the substantive changes to the definition of “exchange” and the impact of such changes on participants and builders in DeFi, we object to the 30-day comment period provided in the Proposing Release, which was too short. Section 553 of the APA requires the Commission to provide the public, including the broad array of market participants who will be affected by the proposed changes (including those who will unwittingly and likely unknowingly become subject to the Commission’s regulatory regime) adequate notice and a meaningful opportunity to provide comment on the Proposing Release for the Commission’s consideration to ensure the proposed rules and changes are appropriately tailored to limit the harm caused while fulfilling the Commission’s policy goals within its mandate.

⁷ 5 U.S.C. § 551 et seq. (1946).

⁸ *Chamber of Commerce v. SEC*, 412 F.3d 133, 144-5 (D.C. Cir. 2005) (“Chamber of Commerce”); *American Equity Investment Life Insurance Company v. SEC*, 613 F.3d 166 (D.C. Cir. 2009) (“American Equity Insurance”); and *Business Roundtable v. SEC*, 647 F.3d 1144, 1148 (D.C. Cir. 2011) (finding that the Commission had failed to “adequately to assess the economic effects of a new rule”) (“Business Roundtable”).

of challenging such enforcement actions will be borne by the very market participants and investors the Commission seeks to protect, heightened by the chilling impact on free speech.⁹ Further, the deficient impact analysis is all the more surprising given that Congress, the SEC Office of Inspector General, the Division of Risk, Strategy and Financial Innovation, and the Office of the General Counsel have all previously endeavored to ensure that the Commission’s rulemaking processes adhere to the APA and its requirements for an economic impact analysis to be integrated throughout the rule development process.¹⁰ This has not occurred here.

The LeXpunK community recognizes the importance of getting digital asset regulation right.¹¹ We appreciate the Commission’s concerns relating to the growing number of venues facilitating markets in digital assets; however, we believe it is imperative for the Commission to have fulsome and informed discussions with the public about any collateral consequences flowing from proposed rulemakings. Thus, we respectfully urge the Commission to provide an explicit consideration of the impact of the Proposing Release on DeFi and digital assets, including a tailored impact analysis and discussion of the anticipated scope of the Proposing Release to capture the digital asset marketplace.

Our comments here endeavor to contribute to a collaborative dialogue designed to achieve the appropriate balance of regulatory considerations. We begin with an overview of DeFi, including a brief history of the industry and a common liquidity provision module; an “automated market maker”. We also review the challenges that the Commission faced during the post Dodd-Frank rulemaking period with regard to problematic impact analyses under the APA. Our comments then examine the ways in which the Proposing Release continues to promote a regulatory framework for emerging technologies that fails to account for detrimental impacts on efficiency, competitiveness, and capital formation. We then provide responses to the Commission’s questions included in the Proposing Release. We intersperse the foregoing with our recommended courses of action.

II. WHAT IS DECENTRALIZED FINANCE?

DeFi refers broadly to peer-to-peer communication protocols that help users exchange digital assets by connecting users directly, either to other individuals or organizations or to smart contracts, in all cases without a centralized intermediary. Many DeFi protocols and applications would meet the definition of a “communication protocol system” as proposed in the Proposing Release.

A. Background

DeFi has grown to a total market capitalization of \$144 billion and a total value locked¹² of \$80 billion as

⁹ The proposed revisions may amount to the prohibitory regulation of behaviors versus actual regulation of trading marketplaces. Code has been defined as speech. *See, e.g.,* *Bernstein v. U.S. Dep’t of State*, 922 F. Supp. 1426, 1434-36 (N.D. Cal. 1996).

¹⁰ SEC Office of Inspector General, Follow-Up Review of Cost-Benefit Analyses in Selected SEC Dodd-Frank Act Rulemakings, Report No. 499 (Jan. 27, 2012) (“OIG Report No. 499”).

¹¹ LeXpunK is in complete agreement with Commissioner Peirce that any such reform efforts must “must take into account the potentially cataclysmic risks of inadvertently making things worse through sloppy or rushed rulemaking that introduces uncertainty for market participants or that deprives the public and the Commission of the opportunity to devote careful attention to thinking through the full implications of the proposed rules.” and further that it would be “unconscionably reckless to do so for a proposal the effects of which will reverberate through all of the markets that we regulate, in ways that we cannot foresee.” *See* Dissenting Statement on the Proposal to Amend Regulation ATS, Commissioner Hester M. Peirce (January 26, 2022), <https://www.sec.gov/news/statement/peirce-ats-20220126>.

¹² Total Value Locked (“TVL”) refers to the cumulative value of all crypto assets deposited into a DeFi protocol. TVL is often used as a metric to gauge market participation, risk-adjusted valuation, and volume within a given protocol.

of April 2022.¹³ DeFi is generally accepted as an “open, permissionless, and highly interoperable protocol stack built on public smart contracts platforms, such as the Ethereum blockchain.”^{14,15} The most fundamental aspect of DeFi is that it relies on (often open source) code that is able to execute transactions without intermediaries, custodians, or clearing houses. The utility of these entities is replaced by event-driven self-executing code that is able to enforce agreements between individuals and other smart systems. This design structure allows for an open and secure financial infrastructure that can be accessed via a public blockchain.¹⁶

In 2013, Vitalik Buterin proposed a trustless, smart contract-based platform that would ensure transaction security and a transparent environment. He proposed that smart contracts would be able to interact with and be built on top of each other.¹⁷ A smart contract’s integration with on-chain data permits a wide variety of transaction types. Further, smart contracts can “custody” digital assets by “locking” the asset within a smart contract until a particular event occurs (e.g., an individual with authority to move the assets decides to do so).¹⁸ Smart contract functions are validated by thousands of network participants and the underlying code is available on the public blockchain, allowing for public scrutiny and assurance of validity. Smart contracts are fully customizable, encouraging innovation and development within the DeFi ecosystem.

B. Automated Market Making

Automated-market-making smart contracts (“AMMs”) are peer-to-peer communication protocols that allow users to exchange digital assets in a decentralized, permissionless, and automated way by using “liquidity pools”¹⁹ rather than a traditional market of buyers and sellers.²⁰ Each exchange of tokens that facilitate a liquidity pool gives rise to a price adjustment according to a deterministic price algorithm.

A typical liquidity pool contains two tokens, representing that pool’s ability to facilitate an exchange of those two assets. When a new pool is created, the first liquidity provider is the one who sets the initial price of the pool’s assets in terms of one another. The liquidity provider is incentivized to supply an equal value (not amount) of both tokens to the pool. If the initial price of the tokens in the pool differs from the current

¹³ See TradingView, CRYPTOCURRENCY MARKET (last visited Apr. 14, 2022), <https://www.statista.com/statistics/1237821/defi-market-size-value-crypto-locked-usd/> and <https://www.tradingview.com/markets/cryptocurrencies/global-charts/>.

¹⁴ Fabian Schär, Federal Reserve Bank of St. Louis Review, Second Quarter 2021, 103(2), pp.153-74. Decentralized Finance: On Blockchain and Smart Contract-Based Financial Markets (2021), <https://doi.org/10.20955/r.103.153-74>.

¹⁵ Vitalik Buterin, “A Next-Generation Smart Contract and Decentralized Application Platform,” (2013), <https://ethereum.org/en/whitepaper/>.

¹⁶ See Schär, *supra* at 153-74.

¹⁷ See Buterin, *supra*.

¹⁸ In reality, no “custody” or “transfer” actually occurs. Distributed ledgers merely serve as records of accounts and any “transfer” that may occur on a blockchain or other distributed/decentralized network is simply a change in an electronic book-entry position. See also Schär, *supra* at 153-74.

¹⁹ Liquidity pools are simply pools of assets for both sides of a trading pair managed by a smart contract for trade execution. Rather than placing an order, like a traditional order book model, AMMs rely on liquidity providers who provide two or more tokens into a liquidity pool in accordance with the then-prevailing market-set ratio of each token to the other(s). While traditional exchanges work through the bid and ask process and are accepted based on a buyer and seller coming together, a liquidity provider has no control over the orders.

²⁰ Based on the proposed definition of “communication protocol system” in the Proposing Release, AMMs would be captured within such definition and regulated accordingly. As this letter details, we believe this is an untenable result that the Commission should address directly.

global market price, an instant arbitrage opportunity is created that can lead to a loss of capital for the liquidity provider. Given the relative proportion of assets in the pool, however, the price is based on what a buyer or seller will pay in order to obtain the other token in the pool.²¹

There is no interaction between buyers and sellers utilizing AMMs to effect trades on DeFi protocols. Buyers and sellers do not negotiate or exchange information and do not know who their counterparty will be ahead of time. A counterparty is not even required to effectuate a trade; users are not trading against counterparties but are trading against the liquidity locked inside a smart contract.²² Importantly, no one entity controls or has a proprietary interest over the system. There is no person or group of affiliated persons who are both necessary and sufficient for user functionality with a liquidity pool's smart contract. These smart contracts are simply machine-readable code that is maintained on a distributed ledger. Once written and deployed to a blockchain, no person controls or can limit access to such smart contracts.

Users deploying AMMs may indicate their “non-firm trading interest” in selling certain digital assets by depositing digital assets into a smart contract.²³ This facilitates trustless, disintermediated exchange of digital assets. When the relevant conditions are satisfied (usually a user on the buy-side sending a transaction message plus a digital asset purchase amount), an exchange is automatically executed.

Thus, an AMM may resemble “a system that electronically displays continuous firm or non-firm trading interest....to sell or buy [a digital asset]...[which] can....be executed immediately”²⁴ despite the fact that it does not perform “the functions commonly performed by a stock exchange,”²⁵ yet the proposed amendments to the definition of an “exchange” would include their operation within its scope.

III. REGULATION OF EXCHANGES AND ALTERNATIVE TRADING SYSTEMS

Section 3(a)(1) of the Exchange Act defines an “exchange” as:

[A]ny organization, association, or group of persons, whether incorporated or unincorporated, which constitutes, maintains, or provides a marketplace or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities **the functions commonly performed by a stock exchange** as that term is generally understood, and includes the market place and the market facilities maintained by such exchange.²⁶ (emphasis added)

²¹ For example, in an AMM liquidity pool for Ether and Bitcoin, every time Ether is bought, the price of it goes up as there is less in the pool than before the purchase. Conversely, the price of Bitcoin goes down as there is more in the pool. The pool stays in constant balance as the total value of Ether in the pool will always equal the total value of Bitcoin in the pool.

²² A smart contract is typically issued through the Ethereum blockchain or a similar blockchain. The code itself is replicated across multiple nodes of the blockchain and, therefore, benefits from the security, permanence, and immutability that the Ethereum blockchain offers. That replication also means that as each new block is added to the blockchain, the code is executed. If the parties have indicated, by initiating a transaction, that certain parameters have been met, the code will execute the step triggered by those parameters.

²³ Assets are deposited into a smart contract by cryptographically signing a transaction whereby the smart contract code will release the tokens to new users if specified conditions are met.

²⁴ Proposing Release at 15500-01.

²⁵ See *supra* note 10.

²⁶ 15 U.S.C. 78c(a)(1).

Persons meeting the “exchange” definition are subject to significant initial and ongoing disclosure, filing, licensing, rulemaking, and other compliance requirements under the Exchange Act.²⁷

Due to emerging technologies that enabled market participants to use non-exchange facilities to effect transactions, the Commission in 1998 adopted Regulation ATS to provide a new framework for regulating venues that, in the Commission’s view, were the equivalent of exchanges.²⁸ Consistent with Regulation ATS’s adoption, Rule 3b-16 was adopted to further define terms comprising the statutory definition of “exchange” to capture some of these exchange equivalents.²⁹

A. Regulation ATS “Exchange Exemption” and the Process of Adopting Regulation ATS

The Regulation ATS Adopting Release stated that in order to be covered by the definition “exchange,” a system must “bring together orders of multiple buyers and sellers.”³⁰ This occurs when “orders entered in the system for a given security have the opportunity to interact with other orders entered into the system for the same security.”³¹

There were a number of features of markets at that time that drove this determination:

1. firm indications of interest (i.e., orders) and algorithms that matched firm indications of interest were performed by non-exchange trading systems;
2. broker-dealers were placing and executing firm indications of interest on the systems; and
3. the systems functioned as limit order books where firm indications of interest were executed according to time, price, and size priority.³²

Regulation ATS’s fundamental objectives reflected the need for a less burdensome system for executing securities orders in the marketplace. As expressed by then-current Commission Chair Unger, Regulation ATS was an adaptation of an existing regulatory framework and was intended to foster innovation by enabling each early-stage participant to “choose the regulatory scheme that best fit its business plan.”³³ Rule 3a1-1 of the Exchange Act codified this by exempting from the definition of “exchange” any organization, association, or group of persons that is in compliance with Regulation ATS.³⁴

Prior to the adoption of Regulation ATS, market participants sought to leverage emerging internet-based technologies for facilitating trading but did not have a viable pathway for complying with Exchange Act

²⁷ See Sections 5, 6, and 19 of the Exchange Act, 15 U.S.C. § 78e-f, 78s (2012).

²⁸ See Securities Exchange Act Release No. 40,760 (Dec. 8, 1998), 63 Fed. Reg. 70,844 (Dec. 22, 1998) (“Regulation ATS Adopting Release”). The Commission adopted Exchange Act Rule 3a1-1 and Rule 3b-16 concurrently with Regulation ATS.

²⁹ Rule 3b-16(a) brings within the definition of “exchange” an organization, association, or group of persons that “(1) brings together the orders for securities of multiple buyers and sellers; and (2) uses established, nondiscretionary methods (whether by providing a trading facility or by setting rules) under which such orders interact with each other, and the buyers and sellers entering such orders agree to the terms of a trade.” 17 C.F.R. § 240.3b-16(a) (2012).

³⁰ Regulation ATS Adopting Release at 70,849.

³¹ *Id.*

³² See generally Regulation ATS Adopting Release.

³³ Laura S. Unger, Commissioner, U.S. SEC, Speech by SEC Commissioner: The Internet -- Will It Be the End of the Stock Market as We Know It? (June 22, 1999), <https://www.sec.gov/news/speech/speecharchive/1999/spch288.htm> (“1999 Unger Speech”).

³⁴ 17 C.F.R. § 240.3a1-1(a) (2012).

rules and regulation. Recognizing the need for gradual adaptation in order to foster compliance and maintaining the viability of broker-dealers adopting such technologies, Regulation ATS set forth straightforward registration obligations that were tuned to reflect that organizations facilitating order crossing were broker-dealers who would be unfamiliar with the additional regulation of this order crossing functionality and consequently, imposed a light framework involving submission to inspections, system descriptions, retention of records, and quarterly activity report filings.³⁵

B. A Tale of Two Commissions

The adoption of Regulation ATS was a watershed moment for the Commission's regulatory framework governing markets. Previously, the regulatory framework was at irreconcilable odds with emerging electronic markets. The Commission, to its great credit, recognized the need to eliminate the barriers to entry that prohibited market participants from taking advantage of new technologies that could benefit investors and make markets more efficient.

Regulation ATS was a resounding success. It provided layers of investor protection while introducing efficiencies and facilitating growth in securities markets. We attribute the success of Regulation ATS to its transparent adoption process, meaningful engagement with stakeholders, and gradual adaptation. Unfortunately, the lack of due consideration and open dialogue regarding the instant Proposing Release cuts in the opposite direction and layers on additional requirements without considering the compatibility with the markets it endeavors to regulate.

As with its adoption of Regulation ATS, the Commission was straightforward in what it set out to achieve with its 2020 Release.³⁶ Yet, the publication of the Proposing Release evinces a vastly expanded scope that would capture all trading venues for any type of security, including digital assets. This is consistent with the current Commission's stance toward DeFi and the digital asset industry broadly, which has combined an aggressive enforcement-led approach with a disjointed patchwork of proposed rules, regulations, accounting bulletins, and public statements.³⁷ The Commission, through the Proposing Release, is attempting to force substantive revisions onto an existing exchange framework that will significantly and detrimentally impact the U.S. financial markets as a destination for emerging technologies and the people who build those technologies.

Today, the Commission claims that securities definitions and the governing regulatory framework for digital assets are fit-for-purpose, but continues to regulate the parameters of those definitions and that

³⁵ See Regulation of Alternative Trading Systems Release No. 34-40760; File No. S7-12-98 Section II(c) (Dec. 8, 1998), <https://www.sec.gov/rules/final/34-40760.txt>.

³⁶ See 2020 Release. The express purpose of the 2020 Release was to enhance transparency and oversight of ATSs and electronic trading platforms for *U.S.-government and other fixed-income securities*.

³⁷ In 2022 alone the Commission has endeavored to propose a panoply of rules further complicating the regulatory environment for digital asset market participants. See, e.g., Rules Relating to Security-Based Swap Execution and Registration and Regulation of Security-Based Swap Execution Facilities, Securities Exchange Act Release No. 34-94615 (Apr. 6, 2022), <https://www.sec.gov/rules/proposed/2022/34-94615.pdf>; Further Definition of "As a Part of a Regular Business" in the Definition of Dealer and Government Securities Dealer, Securities Exchange Act Release No. 34-94524 (Mar. 28, 2022), <https://www.sec.gov/rules/proposed/2022/34-94524.pdf>; Staff Accounting Bulletin No. 121, SEC, (SAB 121 – Mar. 31, 2022), <https://www.sec.gov/oca/staff-accounting-bulletin-121> (which Commissioner Peirce called "yet another manifestation of the Securities and Exchange Commission's scattershot and inefficient approach to crypto." (Statement by Commissioner Hester M. Peirce, Response to Staff Accounting Bulletin No. 121 (Mar. 31, 2022), <https://www.sec.gov/news/statement/peirce-response-sab-121-033122>)).

framework by enforcement.³⁸ To wit, the Commission’s inability to resolve what a “good control location” is as it relates to digital assets on public blockchains is an important example of how the existing regulatory framework is not fit-for-purpose.³⁹ This both hampers adoption and ensures that public blockchain digital assets will not be viable under the current regulatory framework—an issue only exacerbated by the Proposing Release. As another example, the Commission has not offered any vision for how tokens that have utility would be viable if forced to be sold through an exchange or any other regulated financial intermediary.

Exchange registration requirements did not suit the operation of markets in the period leading up to the adoption of Regulation ATS, largely due to immense technological innovations. As a result, the Commission sought to recognize that adaptations needed to be made and acted judiciously in effectuating the same. The Commission has the same opportunity to endeavor to facilitate the appropriate adaptations today with respect to both the proposed revisions to the definition of “exchange” in the Proposing Release and the regulatory framework for digital assets more broadly. Application of securities registration requirements to decentralized projects still has not been qualified, however, and the Commission remains insistent that no adaptation need be made to the historical regulatory frameworks that govern the issuance, sale, and exchange of securities to accommodate decentralized projects, digital assets, and related technologies into the U.S. financial markets.⁴⁰ The Commission’s approach to regulation of DeFi and digital assets, including the Proposing Release, is directly at odds with the approach taken by the Commission in adopting Regulation ATS.

C. Lack of Public Engagement

The Commission had greater regulatory oversight over and engagement with relevant market participants prior to the adoption of Regulation ATS than it does with participants in DeFi and the crypto industry today. Due to this level of engagement, it could be argued that the Commission had less of a need to engage in a fulsome process in connection with the adoption of Regulation ATS than it does with regards to the extension of exchange regulation to DeFi and digital asset participants. In contrast, the process the Commission undertook to craft and adopt Regulation ATS demonstrated robustness—a deliberate, careful effort to understand the concerns and balance the needs of regulators and market participants alike. Such robustness of process is not and historically has not been present in the current Commission’s disjointed

³⁸ See generally Yuliya Guseva, *When the Means Undermine the End*, Stan. J. Blockchain L. and Pol’y (Jan. 5, 2022), <https://stanford-jblp.pubpub.org/pub/when-means-undermine-end/release/1> (demonstrating that the SEC’s choices to regulate digital assets through enforcement has harmed both investors and asset providers).

³⁹ See 17 C.F.R. § 240.15c3-3 (2022). The Customer Protection Rule requires broker-dealers to segregate customer assets in specially protected accounts to facilitate the likelihood of customers being able to withdraw assets in the event of insolvency. To comply, broker-dealers must either physically hold customers’ fully paid and excess margin securities or deposit them at the Depository Trust Company, a clearing bank, or other “good control location” free of any liens or encumbrances. With regards to digital assets, organizations like Securitize and Rialto Markets rely on a Transfer Agent to effectively hold the keys to digital assets on a private distributed ledger network. Because the assets that are traded on the ATS can only be traded by participants on the network, a good control location can be ensured. “Good control location” infrastructure additionally protects customers by allowing mistaken or unauthorized transactions to be reversed or canceled. The Staffs of the SEC and FINRA have rightly identified the existence of a greater risk that a broker-dealer maintaining custody of digital assets could become the victim of irreversible fraud or theft or could lose the private key required to transfer digital asset securities. In the context of requiring any digital asset exchange and given the unresolved status of special purpose broker-dealers, the SEC should advise how the requirement of exchange registration is compatible with the current state of the Customer Protection Rule.

⁴⁰ The Commission has continuously demonstrated that it is not willing to engage in rulemaking processes that revisit the core policy underpinnings of securities and exchange regulation in the United States. The current regulatory regime presupposes the existence of a central opaque actor charged with fulfilling a non-automated intermediary role with human involvement and where oversight is needed to combat fraud and malfeasance.

approach to regulating digital assets and its market participants.

For novel regulatory issues, concept releases offer a mechanism through which the Commission can solicit the public's input on securities issues to permit a more informed dialogue for future rulemaking. The Commission determined that the potential expansion of the definition of "exchange" to capture electronic trading systems for fixed income securities was significant enough to merit a concept release in its 2020 Release.⁴¹ We urge the Commission to contemplate the benefits of a concept release for the current proposed expansion of the definition of "exchange". We believe the Commission would gain valuable input from the broad cross-section of people and organizations it desires to capture within the purview of its exchange and ATS regulations.

Against this backdrop, and in light of the procedural deficiencies associated with the promulgation of the Proposing Release, we request that the Commission undertake the following:

1. withdraw the Proposing Release;
2. either:
 - a. reopen the most recent amendments to the Proposing Release to public comment in the form of a concept release; or
 - b. clarify the more limited scope of its definitional expansions in line with what was previously proposed in the 2020 Release; and
3. after a fulsome consideration of the input of impacted parties, contemplate adequate transition periods, impacts and feasibility of any final definitional expansions of "exchange".

IV. THE COMMISSION'S DEFECTIVE IMPACT ANALYSIS

A. The Importance of Impact Analyses Required Under the Administrative Procedures Act

Pursuant to the APA, a reviewing court can vacate and set aside any agency action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law"⁴² or "without observance of procedure required by law."⁴³ This framework must be read in conjunction with the requirements of the Exchange Act⁴⁴ (as well as the Securities Act of 1933⁴⁵) that state, in pertinent part:

CONSIDERATION OF PROMOTION OF EFFICIENCY, COMPETITION, AND CAPITAL FORMATION.—Whenever pursuant to this title the Commission is engaged in rulemaking, ... and is required to consider or determine whether an action is necessary or appropriate in the public interest, the Commission shall also consider, in addition to the

⁴¹ See Proposing Release at 15497. The concept release included in the 2020 Release presented a limited discussion and request for public comment regarding potential changes to the definition of "exchange" under Exchange Act Rule 3b-16 to address fixed-income electronic trading platforms specifically. See 2020 Release at 216. The Commission received "substantial comment" on the regulatory framework discussed in the concept release. See Proposing Release at 15497.

⁴² 5 U.S.C. § 706(2)(A).

⁴³ 5 U.S.C. § 706(2)(D).

⁴⁴ See 15 U.S.C. § 78c(f).

⁴⁵ See 15 U.S.C. § 77b.

protection of investors, whether the action will promote efficiency, competition, and capital formation.⁴⁶

The Exchange Act requires the Commission to consider the impact that any rule promulgated under that Act would have on competition and to include in the rule's statement of basis and purpose "the reasons for the Commission's . . . determination that any burden on competition imposed by such rule or regulation is necessary or appropriate in furtherance of the purposes of [the Exchange Act]."⁴⁷

In the wake of Dodd-Frank related rulemakings, the D.C. Circuit provided further clarity as to the interpretations of these requirements. Specifically, the D.C. Circuit found that these provisions impose on the Commission a "statutory obligation to determine as best it can the economic implications of the rule."⁴⁸ It has also previously found certain Commission rules "arbitrary and capricious" based upon the Commission's failure to adequately evaluate a rule's economic impact.⁴⁹ In Business Roundtable, the D.C. Circuit was pointed in its criticism, noting the Commission had "inconsistently and opportunistically framed the costs and benefits of the rule; failed adequately to quantify the certain costs or to explain why those costs could not be quantified; neglected to support its predictive judgments; contradicted itself; and failed to respond to substantial problems raised by commenters."⁵⁰

In response to these challenges to the Commission's rulemaking processes and increasing concerns by members of Congress, including a letter from the then Chairman of the U.S. House of Representative Committee on Oversight and Government Reform, the Commission's Office of the Inspector General (the "OIG") undertook an examination of the Commission's approach to a cost-benefit analysis of its Dodd-Frank rulemakings.⁵¹ In January, 2012, the OIG published a report stating "to the extent that the SEC performs cost-benefit analyses only for discretionary rulemaking activities . . . the SEC may not be fulfilling the essential purposes of such analyses—providing a full picture of whether the benefits of a regulatory action are likely to justify its costs and discovering which regulatory alternatives would be the most cost-effective."⁵²

The Commission published "Current Guidance on Economic Analysis in SEC Rulemakings" a few months later (the "Current Guidance"),⁵³ which opened by stating: "High-quality economic analysis is an essential part of SEC rulemaking. It ensures that decisions to propose and adopt rules are informed by the best available information about a rule's likely economic consequences and allows the Commission to meaningfully compare the proposed action with reasonable alternatives, including the alternative of not adopting a rule. The Commission has long recognized that a rule's potential benefits and costs should be

⁴⁶ See also 15 U.S.C. § 80a(2), 15 U.S.C. § 80b-2(c), 15 U.S.C. § 78w(a)(2), 5 U.S.C. §§ 603(a), 604(a), 605(b).

⁴⁷ 15 U.S.C. § 78w(a)(2).

⁴⁸ Chamber of Commerce at 144-5. See also *American Equity Insurance* (there, the Commission had promulgated a rule that excluded certain annuities from an federal securities exemption. The D.C. Circuit vacated the rule on the grounds that the Commission had "failed to properly consider the effect of the rule upon efficiency, competition and capital formation" in accordance with Section 2(b) of the Act and was thus "arbitrary and capricious").

⁴⁹ See Business Roundtable at 1148 (finding that the Commission had failed "adequately to assess the economic effects of a new rule").

⁵⁰ Business Roundtable at 1148-9.

⁵¹ OIG Report No. 499 at vi.

⁵² *Id.*

⁵³ RSFI and OGC, SEC Memorandum, Current Guidance on Economic Analysis in SEC Rulemakings (Mar. 16, 2012), https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf.

considered in making a reasoned determination that adopting a rule is in the public interest.”⁵⁴ This commitment to economic analysis in rulemaking and the Current Guidance continued to be actively promoted by the Commission staff publicly after its promulgation.⁵⁵

B. The Commission’s Analysis Failed To Contemplate Impact on Digital Assets

Despite having in its possession numerous comment letters addressing DeFi prior to publishing the final Proposing Release in the Federal Register,⁵⁶ the Commission chose not to revise its impact analysis.⁵⁷ Excerpts from that analysis include:

1. Total Communication Protocol Systems impacted: 22
2. Communication Protocol Systems that trade securities other than NMS stock or government securities and repos impacted: 14⁵⁸
3. Communication Protocol Systems required to comply with the requirement to file quarterly reports on the proposed modernized Form ATS-R under rule 301(b)(9): 22
4. Communication Protocol Systems required to comply with recordkeeping requirements for ATSs under Rule 302: 22
5. Communication Protocol Systems required to register using Form BD under Rule 15b1-1: 6

While we would like to believe that the Commission has fully assessed the potential impact of its expanded definition of “exchange” on all current market participants and determined to exclude digital asset market participants from this definition, we do not believe this is the case.⁵⁹ The omissions in the Commission’s impact analysis are a symptom of a flawed rulemaking process and are directly related to the Commission’s lack of constructive engagement with the digital asset community respecting the applicability of proposals and concepts included in the Proposing Release.

While the Commission admits some lack of information in its impact analysis, it only does so with regards

⁵⁴ *Id.* at 1-2. Commission staff engaged in rule proposals were instructed to adhere to the following guidelines: (1) identify and describe the most likely economic benefits and costs of the proposed rule and alternatives; (2) quantify those expected benefits and costs to the extent possible; (3) for those elements of benefits and costs that are quantified, identify the source or method of quantification and discuss any uncertainties underlying the estimates; and (4) for those elements that are not quantified, explain why they cannot be quantified. *See id.* at 9-10.

⁵⁵ Craig Lewis, Chief Economist and Director of the SEC’s Division of Risk, Strategy, and Financial Innovation, The Expanded Role of Economists in SEC Rulemaking (Oct. 16, 2012), <https://www.sec.gov/news/speech/2012-spch101612cmlhtm> (“[F]acilitating a rigorous back-and-forth between the Commission and the public regarding the economic effects of the Commission’s rules may be one of the most important contributions of the Current Guidance. As I have described, each element of the Current Guidance promotes transparency in Commission rulemaking. We expressly identify the need for regulatory action, the Commission’s view of the current state of the world, alternative regulatory approaches, and the benefits and costs of the proposed action. This framework provides the public insight into exactly why and how the Commission is choosing to act, and the public then has the opportunity to respond to the Commission on each of these points.”)

⁵⁶ *See* Proposed Release Comments.

⁵⁷ Proposing Release at 345-346.

⁵⁸ For the purposes of this comment letter, we assume that the Commission seeks to treat substantially all fungible tokens as securities.

⁵⁹ As of the time of this comment letter, there are at least 20 DeFi protocols with a market capitalization of at least one billion dollars. *See* CoinMarketCap, Top DeFi Coins by Market Capitalization, <https://coinmarketcap.com/view/defi/> (last visited Apr. 14, 2022). Moreover, as of the time of this comment letter, TVL across the DeFi industry boasts an impressive \$75 billion dollars. *See* DeFi Pulse, Total Value (USD) Locked in DeFi, <https://www.defipulse.com/> (last visited Apr. 14, 2022).

to “6 non-broker-dealer-operated communication protocol systems without a broker-dealer affiliate” due to the inability “to provide cost estimates related to trade reporting obligations” and further notes that “certain restructuring costs, such as costs associated with making changes to business practices to comply with broker-dealer registration requirements, could be significant.”⁶⁰

Given the lack of a compliant pathway for many impacted “communication protocol systems” to register, the Commission’s hourly estimates for initial and ongoing compliance are also inaccurate.

V. PROPOSED AMENDMENTS TO DEFINITION OF “EXCHANGE”

The Proposing Release alters the definition of an “exchange” under Exchange Act Rule 3b-16 in a number of problematic ways for DeFi applications. Inclusion of a “communication protocol system” in the definition of “exchange” means that systems may function as exchange marketplaces for securities *without orders or a trading facility for orders to interact*. Namely, the inclusion would:

1. eliminate “orders” as a necessary definitional criteria for an “exchange”; and
2. create new criteria based on availability of methods to facilitate interactions around trading interest versus actual use.⁶¹

The Proposing Release defines a “communication protocol system” as including “a system that offers protocols and the use of non-firm trading interest to bring together buyers and sellers of securities”⁶² and further describes such systems as using various technologies and connectivity to prompt and guide buyers and sellers to communicate, negotiate, and agree to the terms of the trade without relying solely on the use of orders.⁶³

A. The “Non-Firm Indications of Willingness” Standard Is Vague

Rule 3b-16(c) defines an “order” to mean “any firm indication of a willingness to buy or sell a security, as either principal or agent, including any bid or offer quotation, market order, limit order, or other priced order.”⁶⁴ The precedent surrounding the term “order” is so clear that the need for Commission guidance has been limited.⁶⁵ The definition of “trading interest,” on the other hand, under proposed paragraph (e) of Rule

⁶⁰ Proposing Release at 15636 (“the Commission does not have information regarding the scope of its restructuring, such as the need and the extent of required changes in current business practices, the need and the extent of consulting services, and its choice of entity type for incorporation”).

⁶¹ The scope of the definition of “communication protocol systems” is so broad that the Commission acknowledges that it would have to withdraw no-action letters previously issued to order messaging platforms permitting their operation without having to register as broker-dealers under Section 15(b) of the Exchange Act. *See* Proposing Release at 15507 n.117; *see also, e.g.*, Neptune Networks Ltd., SEC No-Action Letter (Mar. 4, 2020); S3 Matching Technologies LP, SEC No-Action Letter (July 19, 2012); GlobalTec Solutions, LLP, SEC No-Action Letter (Dec. 28, 2005); Swiss American Securities, Inc., and Streetline, Inc., SEC Staff No-Action Letter (May 28, 2002); Prescient Markets, Inc., SEC No-Action Letter (Apr. 2, 2001); Broker-to-Broker Networks, Inc., SEC No-Action Letter (Dec. 1, 2000); Evare, LLC, SEC No-Action Letter (Nov. 30, 1998); Vedder, Price, Kaufman & Kammholz, SEC No-Action Letter (May 21, 1997); Charles Schwab & Co., SEC Staff No-Action Letter (Nov. 27, 1996).

⁶² Proposing Release at 15497.

⁶³ *Id.* at 15507. The Commission includes Request for Quote Systems, Stream Axes, Conditional Order Systems, Negotiation Systems as examples of “communication protocol systems”.

⁶⁴ 17 C.F.R. § 240.3b-16(c) (2012).

⁶⁵ *See, e.g.*, SEC Investor Bulletin: Understanding Order Types (July 12, 2017), https://www.sec.gov/oiea/investor-alerts-and-bulletins/ib_ordertypes.

3b-16 would include both orders and “non-firm indications of a willingness to buy or sell a security”. The Proposing Release does not provide any guidance as to how “willingness” would be evidenced or what would make such “willingness” indications non-firm, but presumably it is meant to act as a catch-all for indications that are not otherwise classified as “orders.” By expanding the definition from objective determinants (i.e. orders⁶⁶) to subjective determinants, such as “non-firm indications of a willingness,” the Commission has introduced a new, vague standard for what interactions could fall within it. As noted, when buyers or sellers interact with an AMM they are not interacting with each other but with a pool of liquidity residing in a smart contract; there is no individual or entity counterparty on the other side, only the smart contract. Terms such as “conditional orders” or “indications of interest” as used in the Proposing Release do not align with AMMs provision of automated liquidity through the smart contract-based deterministic mechanisms. In other words, there is no party imposing such conditions or communicating such interest.

The removal of an order as a determinant pushes the definition of an “exchange” upstream from where an order is created to an indeterminate interaction that is not clearly defined and, in any event, technologically incompatible with DeFi protocols deploying AMMs. Under such logic, it does not matter whether there is actually an order downstream so long as a market participant has facilitated an interaction upstream from an execution. At the very least, it blurs the distinction between the role of messaging protocols and an “exchange”.

B. The “Makes Available” Prong Is Overbroad

The Commission is proposing to amend Rule 3b-16(a)(2) to replace “uses established, non-discretionary methods” with the phrase “makes available established, non-discretionary methods.”⁶⁷ The Proposing Release states that the “makes available” prong of the definition is intended to “capture” *any* party deemed to perform the functions of an exchange.⁶⁸ The Proposing Release further states that this change will help ensure that the investor protection and “fair and orderly markets” provisions of the exchange regulatory framework apply to all the activities meeting the criteria of Rule 3b-16(a), notwithstanding whether those activities are performed by a party other than the organization providing the marketplace.⁶⁹ Under such logic, any group of persons that is deemed to perform a function of an exchange, now broadly construed under the proposed amendments, would have “the regulatory responsibility for the exchange.” Further, the Proposing Release states that “in the event that a party other than the organization, association or group of persons perform a function of the exchange, the function performed by that party would still be captured for the purposes of determining the scope of the exchange....”⁷⁰ Taken literally, it could inadvertently capture developers working with all manner of protocols, front end systems, and smart contracts.⁷¹ The proposed change, if adopted without clarification, could also create a scenario where multiple, unrelated individuals, organizations, or associations would have regulatory responsibility for a single purported

⁶⁶ See generally Proposing Release.

⁶⁷ See Proposing Release at 15504.

⁶⁸ See Proposing Release at 15506.

⁶⁹ See *id.*

⁷⁰ See Proposing Release at 15506 and 25506, n.109.

⁷¹ Such an interpretation would even capture technologists working with FIX, a currently unregulated order and execution message protocol critical to the operation of U.S. financial markets. The Financial Information eXchange (“FIX”) protocol is an open electronic communications protocol designed to standardize and streamline electronic communications in the financial services industry supporting multiple formats and types of communications between financial entities including trade allocation, order submissions, order changes, execution reporting and advertisements. Fix Trading, <https://www.fixtrading.org> (last visited Apr. 2, 2022).

“exchange”.

Such change would create liability and compliance obligations for individuals, entities, and organizations, including organizations with decentralized ownership and governance, in a manner that is not supported by law. This may include persons who:

1. write and publish smart contract code as a hobby or business, whether to an open-source repository or otherwise, and may not otherwise be subject to the jurisdiction of the U.S.;
2. operate “miners” or “validators” on the underlying blockchain where the AMM is stored (i.e., persons who have configured computers to automatically perform mining and validation services on the network, with minimal human oversight);
3. provide liquidity to AMMs;
4. operate websites which facilitate use of AMMs, including academic “block explorers” with smart contract interaction functionality; and
5. write “blockchain client software” run by independent miners/validators.

We believe that to mitigate the unforeseen consequences of the change from “uses” to “makes available” in the definition of “exchange” on DeFi and the digital asset industry, the Commission should clarify that the foregoing persons are not intended to be captured by this expansion by virtue of performing these activities.⁷² None of these persons would qualify as securities professionals or regulated intermediaries today.

If U.S.-based developers could incur liability or compliance obligations because of the rule change, then offshore development will be incentivized at the expense of on-shore development. The distinction between “make available” and “uses” avoids an affirmative action, but it also creates a perverse incentive for offshore providers to make such systems available to U.S. persons because it is unclear how the Commission could utilize extra-territorial jurisdiction with regards to mere software providers in offshore companies that have not otherwise taken any affirmative action to make their software available in the United States.

VI. ATS AND BROKER-DEALER REGULATION

We agree with the Commission’s view that any entity captured as a “communication protocol system” would likely prefer to be regulated as an ATS as opposed to an exchange.⁷³ Beyond the onerous and costly requirements associated with registering as and operating an exchange, there are irreconcilable challenges with imposing not only Regulation ATS compliance obligations on “communication protocol systems” but also the broker-dealer registration requirements to which all such systems would also be required to adhere.

As noted earlier, the Commission has yet to provide clear guidance with respect to “good control location” for public blockchain assets. In the absence of such guidance, it is unclear how digital asset marketplaces that operate on top of public blockchains could ever register as an exchange or an ATS with the Commission. The only available path forward, at present, appears to be for private blockchain-based assets

⁷² LeXpunks recognizes that in certain circumstances there may be control persons who have common control across these technologies. In such cases, it may be appropriate to contemplate whether the sum of the various parts collectively falls within the definition of an exchange.

⁷³ See Proposing Release at 15618. The Commission reasons this would likely be the case because “the regulatory costs associated with registering and operating as an exchange would be higher than those associated with registering as a broker-dealer and complying with Regulation ATS.” *Id.*

with all ownership managed by transfer agents. Such a construct will necessarily limit liquidity and not scale globally.

When Regulation ATS was first adopted, then-current Commission Chair Unger’s vision recognized the need for adaptations that would facilitate “more flexible corporate governance structures” (which today could represent decentralized governance models).⁷⁴ Baked into that recognition was acknowledgement that the traditional organizational model that required market registration might “not be the most appropriate one in an economy operating on triple-paced ‘Internet time’.”⁷⁵ Similarly, emerging advances and implementations of trustless and privacy-preserving structures and technologies offer tremendous market efficiency and investor protection benefits, but these structures and technologies were not contemplated by ATS and broker-dealer regulations. Fundamental to the adoption of these regulations was the assumption that trust-based, highly intermediated structures and technologies were required to regulate actors and the actions attributed to them in the marketplace.⁷⁶ Expanding the scope of exchange regulation without adapting to facilitate more flexible structures and technologies not only deprives market participants and investors of their benefits, but would strip digital assets and their supporting protocols of their efficient and innovative elements. Moreover, the lack of flexibility would force regulated intermediaries to continue to invest in and perpetuate less efficient and competitive market-based infrastructures to the detriment of investors.

With regards to organizational structure, digital asset and DeFi projects are often characterized by the lack of a hierarchy, physical offices, or even bank accounts. Such projects are governed by disparate communities of numerous contributors and stakeholders (many of whom engage with the protocol or project on an pseudonymous basis), which has the effect of democratizing their governance but also creating incompatibility with the disclosures required during the broker-dealer application process.⁷⁷

Broker-dealer customer identification and record retention requirements may unnecessarily restrict the use and further adoption of privacy preserving technologies by entities captured within the definition of an “exchange.”⁷⁸ Specifically, broker-dealers must develop systems for ongoing customer due diligence,⁷⁹ including customer profiles, the “nature and purpose” of the customer relationship and identification of the

⁷⁴ See 1999 Unger Speech.

⁷⁵ See *id.*

⁷⁶ With regards to broker-dealers, verifiable trust means that two principals must be listed in FINRA’s Form NMA (New Member Application) as well as a licensed Series 27 Financial Operations specialist. Principals need to pass a series of examinations, such as General Securities Representative Qualification Examination, the Securities Industry Essentials and General Securities Principal Qualification Exam, and maintain their Series 7 and Series 24 licenses in order to be qualified. The purpose of these licensing requirements is to ensure a base level of competency and continuing education requirements, but very little of the content in such examinations would be directly relevant to the operation of a “communication protocol system”, much less a DeFi protocol that is trustless in its operation. Form NMA also requires the designation of a physical home office, thus necessitating additional state registrations for broker-dealers and principals. FINRA reviews the sufficiency of the facilities necessary to effect the business plan. FINRA Standards for Admission, https://www.finra.org/rules-guidance/guidance/finra-standards-admission#standard_2 (last visited Apr. 16, 2022) (“FINRA Admission Standards”).

⁷⁷ See FINRA Admission Standards. Evidence of an applicant’s source of funding must be verified by FINRA through three months of bank statements from each of the applicant’s source of funds. This generally is updated continuously throughout the application process. This source of funds will typically be traced up to the ultimate beneficial owner which has discouraged venture backed firms, for example, from registering as broker-dealers given the logistical challenges of requiring the provision of banking statements from each of its constituent partners.

⁷⁸ 31 C.F.R. § 1023.220.

⁷⁹ Exchange AML and Customer Identification Program requirements are also extensive but will not be covered here since it is unlikely that any “communication protocol systems” would intentionally submit themselves to the full exchange regulation remit.

beneficial owners of customers.⁸⁰ Broker-dealers (and exchanges) must also comply with the Bank Secrecy Act's "Customer Identification Programs for Broker Dealers" rule (the "CIP Rule")⁸¹ which requires: (a) collection of sensitive personally identifiable information,⁸² records of which must be retained by the broker-dealer for five years after the account is closed;⁸³ and (b) the recordation and retention of each "substantive discrepancy discovered" in the verification process.⁸⁴ These requirements force the retention of personally identifiable information ("PII") that broker-dealers are often poorly positioned to appropriately protect and, significantly, results in the replication of PII across regulated entities. While regulators may cite regulated entities for failures to minimize such access and require procedures to address the dissemination of PII among entities,⁸⁵ the regulatory construct itself is not designed to minimize access to PII. The result, paradoxically, is an increased attack surface of replicated PII "honeypots" held by financial intermediaries. DeFi and digital asset technologies provide opportunities to utilize trustless frameworks leveraging encryption and whitelisting, which is preferable to existing rules and regulations in the context of privacy preservation and data security. Many of the objectives for such disclosure requirements could be effectuated in a more privacy preserving manner with the privacy enhancing technologies on which many DeFi protocols are (and in the future will be) built, including zero-knowledge proofs.^{86, 87}

In many instances, on-chain transaction data from protocols built on public blockchains can be accessed by regulators in a more efficient and effective manner than is available through the Consolidated Audit Trail's ("CAT") trade and order reporting framework. In addition, Regulation ATS mandates the maintenance of:⁸⁸ (a) records of subscribers, including identification of affiliations;⁸⁹ (b) daily trading summaries; and (c)

⁸⁰ FINRA Rule 3310(e) (2018), <https://www.finra.org/rules-guidance/rulebooks/finra-rules/3310>. FINRA also requires that the party responsible for implementation and monitoring the AML program be named. FINRA. Rule 3310(d) (2018), <https://www.finra.org/rules-guidance/rulebooks/finra-rules/3310>.

⁸¹ 31 C.F.R. § 1023.220.

⁸² 31 C.F.R. § 1023.220(a)(2)(i)(A), (ii) (requiring collection of name, address, taxpayer identification number, as well as additional verification through government issued identification or, for entities, certified articles of incorporation or through certain other public databases).

⁸³ 31 C.F.R. § 1023.220(a)(3)(ii).

⁸⁴ 31 C.F.R. § 1023.220(a)(3)(i)(D).

⁸⁵ Investment Adviser and Broker-Dealer Compliance Issues Related to Regulation S-P – Privacy Notices and Safeguard Policies, Office of Compliance, Inspections and Examinations (Apr. 16, 2019), <https://www.sec.gov/files/OCIE%20Risk%20Alert%20-%20Regulation%20S-P.pdf>. The OCIE found, among other matters: (a) deficiencies in the provision and accuracy of mandated privacy notices; (b) lack of appropriate policies and procedures that properly addressed administrative, technical and physical safeguards; (c) policies not implemented or not reasonably designed to safeguard customer records and information; and (d) specific safeguarding concerns for personally identifiable information (PII) in policies and implementation, including (i) retention of PII on employee personal devices; (ii) unencrypted employee communications of PII; (iii) lack of adequate training regarding PII; (iv) sending of PII outside of BD networks; (v) lack of obligations on third party vendors to keep PII confidential even where mandated by policies and procedures; (vi) lack of identification of systems containing PII; (vii) lack of incident response plans upon identified disclosure of PII; (viii) storage of PII in insecure physical locations; (ix) dissemination of employee login credentials in violation of registrant's policies; and (x) departed employees retaining access rights to PII.

⁸⁶ *E.g.*, burrata.xyz, espressosys.com, sardine.ai, sealance.io, synaps.io, and verite.id.

⁸⁷ On the other hand, a determination as to whether the person appears on any lists of known or suspected terrorists or terrorist organizations provided to the financial institution by any government agency (e.g., OFAC) (required per 31 C.F.R. § 1023.220(a)(4)) is an appropriate requirement to impose on communication protocol systems.

⁸⁸ 17 C.F.R. § 240.301(b)(8).

⁸⁹ Rule 302(a) requires identification of "common directors, officers or owners" of affiliations.

time sequenced records of order information.⁹⁰ Expanding these recordkeeping obligations to trustless or trust-minimized “communication protocol systems” that are unlikely to have subscribers (or records identifying subscribers or users beyond externally owned or smart contract accounts) and that may not even utilize orders would force an inefficient and restrictive construct on a marketplace that by its very nature may be unable to adapt to it.

The imposition of broker-dealer, ATS, or exchange requirements on DeFi and digital asset projects, however, would not foster competition or place such projects and protocols on a more equal plane with regulated market participants. Given it would be impossible for most DeFi and digital asset projects to comply with such requirements under the current regulatory structure, the requirements set forth in the Proposing Release would stifle competition and increase inequality among operators in financial markets by serving as a de facto ban of substantially all trustless and trust-minimized DeFi protocols and related digital asset technologies.

VII. CONCLUSION

LeXpунк again thanks the Commission for this opportunity to comment on the Proposing Release. We are optimistic that our comments will assist the Commission in a reevaluation of its approach to exchange and ATS regulation as applied to digital asset markets in light of the importance of this emerging technology.

We appreciate the Commission’s concerns relating to the growing number of venues facilitating markets in securities. It is imperative, however, for the Commission to have fulsome and informed discussions with the public about any collateral consequences flowing from proposed rulemakings, including the Proposing Release. To that end, we request that the Commission provide an explicit consideration of the impact of the Proposing Release on the DeFi and digital asset industries, including a robust impact analysis and discussion of the anticipated scope of the power of the Proposing Release to capture activities in these industries.

The issues raised in the Proposing Release are so critical to U.S. interests and far reaching that we urge the Commission to issue a concept release with the objective of developing a set of proposed recommendations with the assistance of a balanced advisory committee that includes representatives from the digital asset industry. The industry and the public are eager to engage with the Commission in a collaborative manner to develop solutions to controversial issues that appropriately balance the interests of regulators and market participants.

Decentralized finance is complex and the issues involved in crafting impactful regulation are unique in important ways. It is impossible for the Commission to appropriately address these issues without spending more time to conduct a fair and balanced analysis of the ecosystem that engages stakeholders in a constructive environment.

The complexity of these issues requires that the resolution of the specific issue of including “communication protocol systems” in the definition of “exchange” be deferred and be subjected to the benefits of a public discourse that more holistically addresses the downstream effects of the proposed revisions on digital asset markets. Contributors and participants in the DeFi and digital assets industry are passionate and knowledgeable. We are confident that rules and regulations produced through open, transparent, and collaborative rulemaking processes will not only be well calibrated to the Commission’s goals but will also garner stronger support than those drafted using a top-down approach.

LeXpунк members are available and ready to be of service to and engage with the Commission as it

⁹⁰ 17 C.F.R. § 240.302.

considers these issues of critical importance, including the impact of the Proposing Release on digital asset markets, DeFi and the crypto industry. We thank the Commission in advance for its consideration of these comments.

Respectfully,

LeXpunk

cc: Hon. Gary Gensler, Chair
Hon. Hester M. Peirce, Commissioner
Hon. Allison Herren Lee, Commissioner
Hon. Caroline A. Crenshaw, Commissioner
Carl W. Hoecker, Inspector General of the Commission
Dan Berkovitz, General Counsel of the Commission