April 18, 2022

**BY ELECTRONIC SUBMISSION**

Vanessa A. Countryman, Secretary  
Securities and Exchange Commission  
100 F Street NE  
Washington, DC 20549-1090


Dear Ms. Countryman:

Andreessen Horowitz (“a16z”) appreciates the opportunity to comment on the proposal by the Securities and Exchange Commission (“Commission”)¹ to expand the definition of an “exchange” under the Securities Exchange Act of 1934² (“Exchange Act”) and make various related changes to Regulation ATS.³ We are most focused on how the proposed rule changes, if adopted, would impact the emerging web3 ecosystem,⁴ which is built upon digital asset and decentralized finance (commonly known as “DeFi”) technology and holds great promise for market participants and others. As one of Silicon Valley’s leading venture capital firms with over $54 billion under management, a16z was an early investor in Slack, Github, Okta, Pinterest, Lyft, Airbnb, Coinbase, Facebook, and dozens of other leading technology companies. In 2018, a16z established its first stand-alone fund focused on investing in the web3 ecosystem, and has launched several investment funds since then focused on web3, with over $8 billion under management across this family of funds. As the earliest and largest investor in web3 companies and projects, a16z is well-positioned to evaluate the potential impact of the proposed rulemaking on the ecosystem as a whole.⁵

As discussed below, we believe that, if adopted, the unnecessarily broad language contained in the Proposal could be interpreted as applying to a broad array of technologies, including DeFi systems and protocols. Unlike centralized systems that use intermediaries such

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⁴ Web3 refers to the idea of a new kind of internet service that is built using decentralized blockchains. Proponents of web3 envision the service transforming the internet as we know it and ushering in a new digital economy that is not reliant on middlemen. See Kevin Roose, *What is web3?*, N.Y. TIMES (Mar. 18, 2022), https://www.nytimes.com/interactive/2022/03/18/technology/web3-definition-internet.html.
⁵ All figures set forth above describing assets under management are approximate, for illustrative purposes only, and are derived from the firm’s most recent Form ADV filing.
as broker-dealers to match orders and provide market liquidity for trades, DeFi systems enable peer-to-peer transactions and use code-based protocols to self-execute trades with no central operator. Decentralized exchange protocols in particular allow users to exchange digital assets in a disintermediated and trustless manner. In providing such service, they act as one of the fundamental building blocks for the entire web3 ecosystem.

Assuming that the Proposal does reach DeFi systems, it would have significant and adverse consequences for these systems and web3 as a whole. Based on the Proposal and later statements by Commissioners, it is not clear whether this scope was intended or whether these likely effects were evaluated by the Commission in any meaningful way, if at all. Therefore, we respectfully request that the Commission address the many legal and policy concerns identified herein, and in comments by other stakeholders, by clarifying that this rule is not intended to apply to DeFi protocols. In the alternative, the Commission should repropose the rule and address the deficiencies identified here before promulgating a regulation that risks imposing unprecedented and unworkable burdens on DeFi systems.

**INTRODUCTION AND EXECUTIVE SUMMARY**

On March 18, 2022, the Commission published a proposed rule that would dramatically expand the scope of entities within the definition of an “exchange” under the Exchange Act. 6 Specifically, the Commission proposes revisions to Exchange Act Rule 3b-16 7 that would require systems that “offer the use of non-firm trading interest and protocols to bring together buyers and sellers of securities” to register as national securities exchanges or operate as registered broker-dealers and comply with Regulation ATS.8 If adopted, the Proposal would expand the Commission’s regulatory authority over broad categories of systems that allow buyers and sellers to communicate about trading interest in securities, potentially sweeping in innovative systems that enable transactions in digital asset securities.

a16z has serious concerns about the Proposal, which are summarized here and described in further detail below:

- First, it is unclear whether the Proposal was intended to apply to DeFi protocols. As discussed further below, the lack of any explicit reference in the Proposal to digital assets more generally or DeFi protocols in particular—as well as the complete absence of any related economic impact analysis—suggests that the Proposal may not have been designed with this developing ecosystem in mind. Nevertheless, broadening the definition of an exchange in a manner that could apply to DeFi protocols, at a time when

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7 17 C.F.R. § 240.3b-16(a).

8 87 Fed. Reg. at 15,496.
it is unclear which digital assets are considered securities, will create tremendous regulatory uncertainty and deter responsible innovation in the emerging web3 ecosystem.

- Second, this costly uncertainty is compounded by practical and theoretical obstacles. In practice, the Proposal does not on its face address how a protocol governed by a distributed community could even comply with the applicable registration requirements. By replacing traditional intermediaries with autonomous algorithms, DeFi protocols eliminate the need for a central operator that could implement regulatory requirements applicable to traditional securities exchanges or broker-dealers. This disintermediation provides enormous benefits to users and the web3 ecosystem overall, and the application of regulations designed for intermediaries would present immense practical challenges for DeFi systems. Further uncertainty over the extent to which the Commission intends to claim authority over digital assets risks imposing additional costs on DeFi systems. While Commission staff once aimed to provide a helpful framework for determining whether a particular digital asset constituted a security—guidance that was broadly welcomed and relied upon by the industry—recent statements by Commissioners indicate that the staff has not in fact resolved its approach to the regulation of digital assets. By creating an ambiguous definition of a securities “exchange” before providing clarity about which tokens in fact constitute securities, the Commission will inevitably produce more rather than less regulatory uncertainty regarding the obligations of DeFi protocols.

- Third, the Proposal raises several serious concerns under the Administrative Procedure Act (“APA”). While the Proposal makes no specific mention of digital assets or DeFi, it imposes costly uncertainty on DeFi systems that must determine their compliance obligations under the rule. The Proposal does not discuss the registration of DeFi market participants as broker-dealers or the economic impact of requiring such registration. This failure to explicitly account for the significant and costly uncertainty that DeFi systems will face in attempting to comply with the Proposal represents a material gap in the justification for this rule. The quiet expansion of these registration requirements to DeFi protocols, without explicit justification or grounding in clear statutory text, also raises concerns about the Commission overstepping its authority. The Proposal’s shortcomings are particularly troubling given the growth of DeFi protocols and their potential to impact the financial system and all of web3.

- The Commission should therefore clarify that the Proposal does not apply to DeFi systems by explicitly excluding them. In the alternative, if the Commission does intend to regulate DeFi systems under the proposed rule, the current Proposal offers an incomplete analysis of the proposed rule’s economic implications and the universe of reasonable alternatives to the Commission’s approach. It furthermore risks overrunning the statutory and constitutional limits on the Commission’s authority. The Commission must therefore repose the rule to address these shortcomings. Because the Commission offered only 30 days for public comment, it should also extend the comment period for at least 60 days to allow interested parties to meaningfully participate in its rulemaking process.
As others have recognized, as decentralization presents unprecedented opportunities to build a more secure, more transparent, and more equitable economic future. Regulators undoubtedly have a role to play in establishing reasonable safeguards and redressing conduct by bad actors. But the answer is not to extend yesterday’s one-size-fits-all regime to tomorrow’s most promising innovations. Instead, a16z has proposed a regulatory approach for the decentralized economy that would enable oversight while ensuring that this cutting-edge sector can continue to thrive. The hallmarks of this proposal—harnessing the power of decentralized autonomous organizations (“DAOs”), ensuring consumer and investor protection through a sensible disclosure framework, and studying the costs and benefits of various oversight regimes—offer a starting point for regulators to develop the kind of smart solutions that industry stakeholders are eager to adopt and a better fit for the fast-growing and promising DeFi ecosystem.

DISCUSSION

I. THE PROPOSAL COULD BE READ TO IMPOSE BURDENSOME NEW REQUIREMENTS ON DECENTRALIZED FINANCE SYSTEMS

The Proposal does not reference the digital assets held by tens of millions of Americans or the systems or protocols through which transactions in those digital assets can be executed. This sets the Proposal apart from the Commission’s even more recent proposed rule related to the definition of “dealer” under Exchange Act § 3(a)(5), which expressly encompasses “any digital asset that is a security … within the meaning of the Exchange Act.” By its terms, however, the Proposal would appear to cover platforms that enable trades in digital asset securities, because it extends the Exchange Act’s reach to “systems that offer the use of non-firm trading interest and communication protocols to bring together buyers and sellers of securities.” The most natural reading of the Proposal would limit its reach to centralized systems, which rely on third-party middlemen to bring together buyers and sellers of securities and therefore have associated individuals capable of compliance with exchange or broker-dealer registration. But the expansive redefinition of “exchange” proposed by the Commission threatens to sweep into the agency’s regulatory ambit even truly decentralized systems, which

11 Id.
14 87 Fed. Reg. at 15,496.
eliminate third-party intermediaries and instead perform their functions via embedded smart contracts, as described in more detail below.

If applied to DeFi platforms, the Proposal would impose significant burdens on further innovation in these systems, which are likely to serve as the foundation for the internet of the future. It may also be more than the Commission has planned for—Chair Gensler has only recently reiterated that the Commission staff is still studying the best approach for oversight of DeFi systems, including “how to best register and regulate platforms where the trading of securities and non-securities is intertwined,” and “whether and how the protections that are afforded to other investors on exchanges with which retail investors interact should apply.”

A. The Proposal Marks an Unnecessary Expansion of the Commission’s Authority

1. The Commission Originally Promulgated Regulation ATS to Provide Trading Systems an Alternative to Registration as an “Exchange”

The Commission adopted Regulation ATS in 1998 in order to develop an alternative regulatory scheme so that then-fledgling electronic communication networks and alternative trading systems (“ATSs”) that satisfied the definition of an “exchange” could operate through enhanced broker-dealer registration and Commission oversight without incurring the financial, regulatory, and other costs associated with registering as national securities exchanges pursuant to Section 6 of the Exchange Act. Exchange Act Rule 3b-16, adopted at the same time as Regulation ATS, defines an “exchange” as any organization, association, or group of persons that “brings together the orders for securities of multiple buyers and sellers” and “uses established, non-discretionary 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 the trade.”

A system meeting the definition of “exchange” must either register as a national securities exchange under Section 6 of the Exchange Act or operate as an alternative trading system pursuant to the requirements introduced in Regulation ATS. If a system decides to forego registration as an exchange and comply with Regulation ATS instead, it must register as a broker-dealer and become a member of FINRA. It must also file an Initial Operation Report on Form ATS describing its subscribers and securities traded, its manner of operations, and its order entry, means of access, execution, and trade reporting processes. ATSs meeting specific

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17 17 C.F.R. § 240.3b-16(a).
18 Id. § 242.301(a).
19 Id. § 242.301(b).
trading volume thresholds and displaying orders to subscribers are required to display their best-priced orders publicly. ATSs meeting other trading thresholds are required to have written standards for granting fair access to their systems. ATS operators are required to keep Form ATS up-to-date, provide quarterly reports on their operations, and provide advance notice to the Commission of material changes to system operations.\textsuperscript{20} ATSs that trade national market system ("NMS") securities (i.e., exchange-traded stocks) are subject to more detailed disclosure requirements set forth in Regulation ATS-N.

2. \textit{The Proposal Would Greatly Expand the Scope of Regulation ATS, In Part by Expanding the Definition of "Exchange"}

The Commission proposes to amend the definition of "exchange" under Rule 3b-16. Under the proposed rule, an "exchange" would include any organization, association or group of persons that "brings together buyers and sellers of securities using \textit{trading interest} and \textit{makes available} established, non-discretionary methods (whether by providing a trading facility or \textit{communication protocols}, or by setting rules) under which buyers and sellers can interact and agree to the terms of a trade."\textsuperscript{21} These changes could require a vast array of systems that enable users to communicate interest regarding securities to register as exchanges or to operate as broker-dealers pursuant to Regulation ATS for the first time.

To start, the term "trading interest," as used in the Proposal, would encompass not only orders, but any non-firm indication of a willingness to buy or sell a security that identifies at least the security and either the direction (buy or sell) or price.\textsuperscript{22} The Commission explains that it intends the Proposal’s focus on "trading interest" to cover systems that "offer a negotiation functionality" or "allow[] a market participant to communicate its intent to trade and a reasonable person receiving the information to decide whether to trade or engage in further communications with the sender."\textsuperscript{23}

Next, the Proposal defines "exchange" to include any system that "makes available" (rather than "uses") methods of bringing together buyers and sellers, including "communication protocols."\textsuperscript{24} This change is designed to capture established, non-discretionary methods that an organization, association, or group of persons may provide, whether directly or indirectly, for buyers and sellers to interact and agree upon the terms of a trade.\textsuperscript{25} It would, the Proposal notes, more clearly extend the definition of exchange to systems that arrange for third parties to offer a trading facility, or rely on various functionalities, mechanisms, or protocols operating collectively within the system to facilitate transactions between buyers and sellers.\textsuperscript{26} The Proposal mints a new term—"Communication Protocol Systems”—to describe the entities that

\textsuperscript{20} Id.
\textsuperscript{21} 87 Fed. Reg. at 15,646 (emphases added).
\textsuperscript{22} Id.
\textsuperscript{23} Id. at 15,505.
\textsuperscript{24} Id. at 15,646.
\textsuperscript{25} Id. at 15,506.
\textsuperscript{26} Id.
offer communication protocols and the use of non-firm trading interest to bring together buyers and sellers of securities. The Commission believes that the term “makes available” is more appropriate to describe these systems because they take a more passive role in providing participants with the means and protocols to interact, negotiate, and come to an agreement.


The Commission’s expansive new rule threatens to adversely affect both traditional systems and newer protocols that enable transactions in digital asset securities. The Proposal explicitly cites traditional “Request-for-Quote” (“RFQ”) systems as examples of “Communication Protocol Systems” newly captured by the proposed redefinition of “exchange.” Indeed, any broker-dealer or non-broker-dealer that has systems related to trading or communicating trading interest in securities is potentially swept up by the proposed rule and could therefore find itself obligated to comply with Regulation ATS or register as a national securities exchange. As Commissioner Peirce emphasized, the proposed rule potentially implicates anyone “who operate[s] any service that is designed to facilitate any communication between potential buyers and sellers of any type of security.” The Commission has indeed signaled its intent to read the term expansively.

B. The Proposal Is Most Naturally Read to Exclude DeFi Systems

The Proposal does not explicitly mention digital assets and there is no analysis of the economic impact that this proposed rule would have on the emerging web3 ecosystem. The absence of any reference to digital assets is particularly notable given the express reference to digital assets in another recent Commission proposal. And the omission of a cost-benefit analysis directly addressing the Proposal’s implications for DeFi systems is striking, since the Commission is charged with assessing the economic effects of its proposed rules. As a result, the most plausible reading is that the Proposal was not intended to cover DeFi systems at all. Applying the burdensome requirements of exchange or broker-dealer registration to truly

27 Id.
28 Id.
29 In Commission guidance, “digital asset” has been used to refer to “an asset that is issued and/or transferred using distributed ledger or blockchain technology (‘distributed ledger technology’), including, but not limited to, so-called ‘virtual currencies,’ ‘coins,’ and ‘tokens.’ A “digital asset security” has been defined as “a digital asset that meets the definition of a ‘security’ under the federal securities laws.” 86 Fed. Reg. 11,627, 11,627-628 n.1.
32 The Proposal states that its expanded definition of “exchange” applies to “any system that falls within the criteria … notwithstanding how thinly traded or novel a security may be.” 87 Fed. Reg. at 15,503.
33 See supra note 13 and accompanying text.
34 See infra Section III.B.1.
decentralized systems would, in fact, likely be self-defeating. Doing so would not advance the goals underlying Regulation ATS, such as regulating financial intermediaries and promoting competition. The Proposal could, moreover, stifle innovation and undermine progress toward serving the un- and underbanked. As noted below, there are more efficient ways of pursuing the Commission’s goals, ways that could play on the strengths of these burgeoning web3 technologies and avoid confusion due to overlapping claims to authority by various federal agencies.

1. **Innovative New Technologies Have Ushered in the Development of Decentralized Alternatives to the Traditional Finance System**

One of the key promises of the rise of digital assets is the advent of DeFi. DeFi participants transact with one another directly rather than through an intermediary. This is made possible by programmable blockchain technology, which offers security and transparency while eliminating some of the barriers to entry found in the traditional, centralized financial system.

Individuals can engage in peer-to-peer transactions in digital assets through what is known as a decentralized exchange (“DEX”). Through a DEX, one person can exchange her digital currency for that of another—she can, for example, trade her Bitcoin for someone else’s Ether. At no point does either user need to deposit assets with a central authority. DEXs allow two strangers to feel confident engaging in these types of transactions by relying on “smart contracts” to facilitate the exchange of assets. Smart contracts automatically enforce the parties’ contractual arrangement by self-executing transactions under set conditions and posting the completed transactions to the blockchain.
Smart contracts also enable DEXs to retain the liquidity necessary to power these decentralized transactions. While the centralized financial system relies on broker-dealers and other intermediaries to serve as market makers (providing liquidity for high volumes of trades), DEXs eliminate the middleman through automated market makers (“AMMs”), code-based protocols that, once created, run autonomously without direction by an intermediary. AMMs incentivize users to pool their assets in a DEX’s smart contracts by rewarding those liquidity providers with tokens representing a share of the fees paid on transactions, allowing the DEX to supply liquidity for users to swap between digital assets.

These features enable DEXs, once launched, to operate autonomously, pursuant to the conditions of the smart contacts and the decentralized participation of the system—no central authority or enterprise required. Decentralized exchange protocols in particular allow users to exchange digital assets in a disintermediated and trustless manner, and in providing such service they act as one of the fundamental building blocks for the entire web3 ecosystem. The seamless exchange of tokens incorporated into all web3 applications—from social media to gaming and gig economy marketplaces—is as fundamental to the emerging web3 ecosystem as a common communications protocol was to the development of the internet.

2. Extending the Proposal to DeFi Systems Would Not Further the Goals of Regulation ATS

The Commission introduced Regulation ATS in order to provide an alternative to exchange registration that would protect investors while promoting innovation in the financial system. And the Commission now anticipates that, if the Proposal is adopted, systems newly subject to exchange registration will choose to comply with Regulation ATS and register as broker-dealers. But even casting aside the practical challenges that DeFi protocols would confront in attempting to follow Regulation ATS, the Commission seems to overlook the fact that the purposes behind Regulation ATS would not be served by imposing its requirements on DeFi protocols.

In promulgating Regulation ATS, the Commission sought to create a customized regulation for nascent systems operated by registered broker-dealers that met the definition of an

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44 Schär, supra note 36, at 162.
47 See Schär, supra note 36, at 154 (“[T]his architecture can create an immutable and highly interoperable financial system with unprecedented transparency, equal access rights, and little need for custodians, central clearing houses, or escrow services, as most of these roles can be assumed by ‘smart contracts.’”).
49 87 Fed. Reg. at 15,634 n.1153.
exchange and were providing benefits to investors by stimulating competition among exchanges and the broker-dealer operators of such systems. It therefore required covered systems to maintain membership in a self-regulatory organization (“SRO”), file initial reports describing their operations, keep the Commission abreast of any operational updates, implement increased transparency for significant systems that displayed orders, and adopt standards to ensure fair access.50 Because ATSs are operated by registered broker-dealers, they are also subject to Commission rules related to net capital, the protection of customer funds and securities, risk management related to orders routed to exchanges and ATSs, trading in national market system (“NMS”) securities, and books and records requirements.51 In addition, they must follow FINRA rules that generally address the registration and supervision of associated persons, communications with the public, financial and operational rules related to net capital and customer protection, offering and trading practices, quotation and order handling, trade reporting, and conflicts of interest.52 These requirements reflect the Commission’s goal of regulating the conduct of financial intermediaries, a goal that the Proposal does not further by extending Regulation ATS to cover disintermediated systems such as DeFi protocols.

The Commission also believed Regulation ATS would help promote competition by equipping the agency with “the tools it needs to adopt a regulatory framework that addresses its concerns about alternative trading systems without jeopardizing the commercial viability of these markets.”53 Commenters, the Commission noted, generally agreed that “the proposal provided a framework that could maintain a competitive balance among the markets offering services to investors.”54 In enacting Regulation ATS, the Commission therefore concluded that Regulation ATS would “encourage innovation, accommodate the growing role of technology in the securities markets, improve transparency for market participants and ensure the stability of trading systems with a significant role in the markets.”55 That is the type of innovative regulatory thinking that should be applied with respect to DeFi. But, as explained in more detail below, requiring DeFi protocols to attempt compliance with Regulation ATS could have the opposite effect, chilling innovation and curtailing the nation’s competitive edge.

3. Extending the Proposal to DeFi Systems Could Counter the Positive Impact of DeFi on the Unbanked and Underbanked and Stagger the Nation’s Competitive Advantage

In his recent Executive Order on Ensuring Responsible Development of Digital Assets, President Biden recognized the United States’ “strong interest” in promoting innovation that expands equitable access to financial services for the large number of Americans who are unbanked or underbanked.56 DeFi systems are already expanding access to basic financial

50 63 Fed. Reg. at 70,863-70,875.
51 See 17 C.F.R. §§ 240.15c3-1, 240.15c3-3.
52 See, e.g., FINRA Rules 1012, 2150, 2210, 4330, 5210, 6110.
53 63 Fed. Reg. at 70,846 (emphasis added).
54 Id.
55 Id. at 70,910.
56 Executive Order on Ensuring Responsible Development of Digital Assets, see supra note 35.
services for underbanked users through the use of stablecoin payment systems. What’s more, minorities are adopting digital token use through such systems at a higher rate than other demographics. Subjecting DeFi systems to a regulatory regime that they cannot comply with could force them into extinction, counteracting the positive impact they have had in expanding access to financial services for marginalized groups.

President Biden’s executive order acknowledged the nation’s interest in “ensuring that it remains at the forefront of responsible development and design of digital assets and the technology that underpins new forms of payments and capital flows in the international financial system.” And the Commission has, in the past, emphasized that it designed Regulation ATS to promote competition and “accommodate [] evolving technology.” But as Commissioner Peirce recognized, the Proposal could lead the United States to stray even further from these goals. The proposed change to the definition of exchange, she wrote, “could deter innovation and dissuade new entrants from entering into the market for trading venues and execution services.”

Decentralization enables innovations that are simply not possible to replicate through traditional, centralized systems. One of the true utilities of DEXs, for example, is that they act as a core primitive and infrastructure layer for all of web3, enabling the entire ecosystem of web3 applications, products, and services to utilize them in a manner that is seamless for the user. This will allow users to exchange their own assets into the assets of such systems through automatic routing without ever having to visit a centralized exchange or interact with an intermediary. Furthermore, DEXs enable trading of digital assets by bots, which help to provide stability to the entire web3 ecosystem. The United States will not be able to compete in the web3 economy of the future if DeFi systems are not able to grow here. Industry stakeholders have emphasized that, in order for the United States to remain at the forefront of digital asset development, policymakers must enact policies that “foster rather than limit innovation,” as a regulatory scheme enacted without sufficient consideration of the consequences for digital assets “poses a risk of driving digital token-related investment out of the U.S. and into competing economies.”

58 Id.
59 Executive Order on Ensuring Responsible Development of Digital Assets, supra note 73.
61 Peirce, supra note 31.
62 Letter from Chamber of Digital Commerce, supra note 57. Government leaders have likewise recognized the importance of maintaining the nation’s competitive edge. See Executive Order on Ensuring Responsible Development of Digital Assets, supra note 35 (“We must reinforce United States leadership in the global financial system and in technological and economic competitiveness, including through the responsible development of payment innovations and digital assets.”); Remarks from Secretary of the Treasury Janet L. Yellen on Digital Assets, U.S. Dep’t of Treas. (Apr. 7, 2022) (“[T]he government’s role should be to ensure responsible innovation — innovation that works for all Americans, protects our national security interests and our planet, and contributes to our economic competitiveness and growth.”).
We should not risk pushing these systems to move elsewhere, harming the nation’s ability to lead in this ever-growing sector.

4. **Extending the Proposal to DeFi Systems Would Sideline More Efficient Ways to Ensure Investor Protection**

The Proposal expressed concern that market participants using Communication Protocol Systems cannot, under current regulations, avail themselves of the same investor protections that apply to registered exchanges and ATSs. The proposed redefinition of “exchange,” however, does not offer an efficient means of meeting the Commission’s investor protection goals. That is because the Proposal envisions bolstering investor protections by requiring Communication Protocol Systems to newly register as broker-dealers—and comply with Regulation ATS—or as exchanges under Section 6 of the Exchange Act. But the rules and regulations attending broker-dealer status do not neatly apply to pure Communication Protocol Systems, including the DeFi protocols that could be subject to the expanded rule. As described below, the Commission appears not to have considered more efficient means of achieving investor protection. It has instead adopted an approach that is poorly suited to DeFi systems (assuming the Commission intends the Proposal to apply to such systems) and intrusive of the territory of other agencies.

Rather than extend the existing regime of exchange and broker-dealer registration, policymakers should instead focus on creating a regulatory environment that protects investors while also allowing for continued experimentation and innovation in recognition of the security and resiliency of decentralized networks. One solution in line with that goal would be a new disclosure-based supervision regime that accommodates the unique features of the DeFi system and ensures that, at key milestones, users are provided the information they need to responsibly participate in DeFi systems. Under a disclosure-based regime, a regulator would be able to set clear and tailored disclosure-based standards, and developers would be able to work those standards into the code governing a project to ensure ongoing compliance automatically. In that way, such regimes would be native to the DeFi ecosystem. This would enable far greater efficiencies than the ill-fitting compliance regime that the Proposal could extend to DeFi systems. It would, moreover, encourage greater communication between industry members and regulators, and allow for the development of a regulatory scheme aligned with the strengths of the industry: transparency and decentralization.

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64  Id. at 15,502-15,503.
66  Letter from Chamber of Digital Commerce, supra note 57.
69  Id.
The self-regulating nature of DeFi protocols also makes them well-suited to governance by an SRO in the form of a DAO. Under such a regime, DAO members would self-certify to become members, which would establish various standards to promote investor protection. These standards could include, for example, disclosure standards regarding the operation of any DeFi protocol and potential risks to users, standards relating to decentralized governance, standards relating to decentralization policies, terms of service and terms of use, standards relating to risk assessment, safety modules and self-insurance, open source standards, and listing standards that seek to limit accessibility in the United States for trading of digital assets that satisfy the definition of “security” under the Exchange Act. If a member was not in compliance with the DAO’s standards, its membership could be challenged, thereby empowering the decentralized community of DeFi participants to self-regulate. An SRO DAO would offer significant benefits over an expansion of the Commission’s jurisdiction to cover DeFi systems. It could ensure transparency and investor protection in a way that makes sense for the realities of how DeFi protocols operate—leveraging the power of smart contracts, decentralization, and other DeFi innovations—without inhibiting economic and technological progress.

Another of the Proposal’s inefficiencies arises from the potential for jurisdictional overlap between the Commission, the Commodities Future Trading Commission (“CFTC”), and the Federal Communications Commission (“FCC”).

70 For example, the FCC, which Congress has broadly empowered to regulate communications systems, stated in its most recent strategic plan that among the agency’s key priorities is “to foster a competitive, dynamic, and innovative market for communications services through policies that promote the introduction of new technologies and services.”

71 Through the Dodd-Frank Act, Congress granted the CFTC authority over any “trading system or platform that allows multiple participants to execute or trade swaps with multiple participants through any means of interstate commerce.”

72 And Chair Gensler recently stated that he has directed the Commission staff to coordinate with the CFTC and determine how the agencies might jointly regulate some of the activity of centralized and decentralized systems enabling digital asset transactions.

73 The redundancies introduced by the Proposal’s extension to “Communication Protocol Systems” could create inefficiencies, cause confusion for industry stakeholders, and undermine the intent of Congress in delegating to these agencies their separate regulatory spheres.

II. THE PROPOSAL CREATES COSTLY UNCERTAINTY FOR DECENTRALIZED FINANCE SYSTEMS

a16z believes that the Proposal is best read to cover only centralized systems, leaving truly decentralized systems outside of the Commission’s expansive redefinition of “exchange.”

70 See Gabriel Shapiro, Urgent Considerations of Impact on Blockchain/DeFi of the SEC’s Proposed Regulation ATS Amendment, LEX NODE’S OFFICIAL CRYPTO NEWSLETTER (Jan. 27, 2022),

71 STRATEGIC PLAN 2018-2022, FED. COMM’NS. COMM’NS. (Feb. 12, 2018).

72 7 U.S.C. §§ 1a(50), 7b-3(h); see 86 Fed. Reg. 9224, 9224(Feb. 22, 2021).

73 See Gensler, supra note 15.

74 See Shapiro, supra note 70.
Nevertheless, the broad reading that the Commission has suggested it will adopt could—whether intentionally or inadvertently—be read to capture digital asset market participants, including validators, developers of smart contracts, and website operators, to the extent that they communicate trading interest regarding digital asset securities. Indeed, the Proposal could have especially significant consequences for DeFi systems that facilitate communications regarding potential transactions in digital assets. First, the realities of decentralization make compliance impracticable. And second, the regulatory status of most digital assets remains murky. These create costly uncertainties for DeFi systems.

A. Key Elements of the Proposal Might Be Impossible for DeFi Systems to Comply With

While DeFi systems may be swept up in the Commission’s proposed expansion of the Exchange Act, the registration and compliance requirements applicable to traditional trading systems do not neatly translate to the cutting-edge DeFi ecosystem. As noted above, the key innovation of DeFi is that it disintermediates transactions in digital assets. DeFi systems involve a variety of actors who participate in the digital asset marketplace in different ways, including developers of smart contracts, website operators, and validators. None of these actors has an exact counterpart in the centralized intermediary system of the traditional securities market. This raises a fundamental question about potentially extending the reach of the Commission’s regulatory authority over the “communication protocols” offered by DeFi market participants: Under the Proposal, who would be responsible for compliance with Regulation ATS? The protocol developer that no longer has a role in the protocol and does not have the ability to stop its operation? The participants in the AMM pools that express their interest in trading certain digital assets, even though they did not build the AMM smart contract and have no control over it? The operators of applications or other modes which allow users to access DeFi protocols, even though they did not build the AMM smart contract and have no control over it?

The Proposal does not offer any means of answering these questions. In asserting jurisdiction over systems that “bring[ ] together buyers and sellers of securities using trading interest” and “make[ ] available” “communication protocols” “under which buyers and sellers can interact and agree to the terms of a trade,” the Commission thus provides many of these systems with no hint as to how to comply (if compliance were required). Nor does agency practice shed any light on these lingering uncertainties. The Commission has brought only one enforcement action against the founder of a self-described DEX, but the targeted system was not truly decentralized. The Commission’s action in that case therefore does not provide insight into who the Commission would expect to assume responsibility, on behalf of DEX that has been launched and is fully decentralized, for complying with Regulation ATS.

75 See supra Section I.B.1.
77 See id. at 9 (“Coburn … exercised complete and sole control over EtherDelta’s operations.”).
Relatedly, even if it were clear which party in the context of a DeFi protocol had the obligation to comply with Regulation ATS, it is not obvious that such party has the necessary information to fulfill that responsibility.\(^78\) Once smart contracts underlying DEXs are deployed, there is no central operator of the DEX that could complete the Form ATS or comply with the other periodic reporting requirements of Regulation ATS. Nor can those who “make[] available” AMMs identify, track the orders of, or report to the Commission information about users of Communication Protocol Systems, as the Proposal would require.

In this respect, Commissioner Peirce has expressed the view that truly decentralized DeFi protocols should be treated differently from centralized entities.\(^79\) We believe that she is right. As Commissioner Peirce acknowledged, users of AMMs come to DeFi systems with the knowledge that the system’s code will determine whether and how that trade will happen and there is no party standing ready to reverse a “bad” trade. Because it is not clear that DeFi systems involve “anyone who could be held liable in a manner consistent with the rule of law and our constitutional principles,” “[t]ruly decentralized platforms do not mesh well with a regulated approach designed for centralized finance.”\(^80\) Any proposal for regulating DeFi systems must, at a minimum, be based on an understanding of the ability of such systems to comply with regulatory requirements.

B. Regulatory Uncertainty Would be Unduly Burdensome for DeFi Systems

An additional layer of uncertainty looms in the background, as the Commission has not made clear which digital assets it believes are “securities” and thus fall within the Commission’s jurisdiction. Several years ago, the Commission staff provided helpful guidance as to the application of the term “investment contract” to digital assets under the Howey test adopted by the Supreme Court,\(^81\) and specifically noted that two digital assets—Bitcoin and Ether—are not securities.\(^82\) This gave stakeholders a better sense of how to determine whether any given digital asset is a security. More recently, however, the Commission has given mixed signals as to whether this guidance—on which the industry has relied since its publication—continues to be applicable, and if not, what might replace it. Commissioners have instead signaled that they will

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\(^79\) Peirce, supra note 9.

\(^80\) Id.


\(^82\) See Bill Hinman, Digital Asset Transactions: When Howey Met Gary (Plastic), U.S. SEC. & EXCH. COMM’N (June 14, 2018) https://www.sec.gov/news/speech/speech-hinman-061418 (The former director of the Commission’s Division of Corporation Finance stated that he did not view Bitcoin or Ether to be securities at that time. Although notable, this position reflected his own views and does not necessarily reflect those of the Commission, the Commissioners, or other members of the Commission staff.).
not offer “blanket definitions” or “proactively label all the specific projects, assets, and activities that are within [the Commission’s] jurisdiction.” In addition, Chair Gensler recently declined to answer when asked whether he views Ether as a security, which further calls into question the helpful guidance that was previously issued and relied upon by many market participants. In the absence of guidance as to the status of specific digital assets, market participants have been left to interpret these anecdotes as regulatory tea leaves. Indeed, these concerns about the regulatory status of digital assets have become particularly acute since the Commission staff signaled that it will provide no amnesty to companies that discover and self-report practices that the Commission may now view as violations of the securities laws. The Proposal, however, does nothing to clarify the obligations of DeFi systems with regard to digital asset transactions. In fact, the proposal does not mention “digital asset securities” or “investment contracts,” two of the terms the Commission uses to describe digital assets believed to be securities. These omissions will further compound the uncertainty over whether the Proposal was meant to cover digital assets.

Faced with these uncertainties, some DeFi systems or protocols that do not clearly meet the definition of “Communication Protocol Systems” or facilitate transactions in digital assets could endeavor to comply with the Proposal’s requirements through protective registration as an exchange or a broker-dealer. Other systems or protocols might not. This raises the danger of inconsistency, which could create unforeseen consequences in the market for digital assets as well as undermine the Commission’s professed goals in promulgating the Proposal. Most likely, DeFi systems would incur substantial costs in seeking to comply with the additional requirements of the Proposal lest the Commission determine that they are in fact securities exchanges. Even then, as described above, it would likely be impossible for DeFi systems to comply with the requirements of Regulation ATS in practice.

85 Indeed, the lack of clarity around which digital assets are considered securities has been criticized by certain Commissioners. Commissioners Peirce and Roisman have stated that “[i]n this void [of clear Commission-level guidance], litigated and settled Commission enforcement actions have become the go-to source of guidance.” Cmm’rs Hester M. Peirce & Elad L. Roisman, In the Matter of Coinschedule, U.S. SEC. & EXCH. COMM’N (July 24, 2021), https://www.sec.gov/news/public-statement/peirce-roisman-coinschedule.
III. The Proposal Raises Serious Concerns Under the Administrative Procedure Act

The Commission’s expansive redefinition of “exchange,” as detailed above, could potentially impose new costs on a range of DeFi systems. It appears, however, that the Commission did not consider how the Proposal might affect this vital and growing sector of the economy. It should therefore clarify that the Proposal does not cover truly decentralized systems. If the Commission does intend to set the stage for exchange regulation of digital platforms, including DeFi systems—despite Chair Gensler’s indication that the Commission staff is still studying how best to approach platforms enabling digital asset transactions—it should repropose its rule to say so clearly, and should forthrightly consider the costs and benefits of such a decision. And if it does so, the Commission should provide additional time for stakeholders, including a16z, to bring to the agency’s attention the significant ramifications of its proposed rule. Otherwise, the Commission risks falling out of compliance with its obligations under the APA to engage in reasoned decision-making and invite meaningful public participation.

A. The Commission Should Clearly State that the Proposal Does Not Extend to DeFi Systems

1. The Commission Has Not Grappled with the Proposal’s Implications for DeFi Systems

As noted above, the Commission does not expressly grapple with the fact that, in proposing to expansively redefine “exchange,” it potentially captures DeFi protocols. That omission may stem from the fact that the traditional framework governing exchanges and broker-dealers is a poor fit for these innovative new systems that operate without a central intermediary capable of assuming the compliance obligations imposed by exchange registration or Regulation ATS. It may also be attributable to the uncertainty surrounding how the principal feature of exchanges—bringing together orders of multiple buyers and sellers of securities—translates to truly decentralized systems that facilitate transactions in digital assets. Read broadly, however, the Proposal could sweep DeFi systems into this decades-old regulatory regime. To ensure that these entities do not bear the costs of assessing the Proposal’s ambiguous scope, the Commission should announce that the Proposal does not extend to DeFi systems.

2. The Commission Would Act Arbitrarily in Failing to Explicitly Exclude DeFi Systems from the Proposal’s Reach

An agency’s proposed rule must be “the product of reasoned decision-making.” If the agency “entirely fail[s] to consider an important aspect of the problem” it seeks to address, its

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87 See supra Section I.B.
88 See supra Section II.A.
89 See supra Section II.B.
action is arbitrary and capricious in violation of the APA. Should the Commission decline to clearly state that the Proposal excludes DeFi systems, it will be ignoring a substantial practical challenge posed by the proposed rule, and thus acting arbitrarily. As explained in detail above, truly decentralized systems would face insuperable barriers to implementing key requirements of exchange or broker-dealer registration; without a central intermediary to carry out registration, data collection, and disclosure responsibilities, a DeFi system could not realistically comply. The Commission nowhere addressed the obvious practical difficulties that would result from extending the Proposal to DeFi systems. Nor did the Commission’s brief discussion of the alternative regulatory approaches it rejected touch on any options that would have lessened or resolved these challenges. The Commission should therefore explain that DeFi systems are not expected to attempt compliance with the ill-suited framework governing exchanges or broker-dealers.

3. The Commission Has Not Evaluated the Costs of Uncertainty that DeFi Platforms Would Face Without Further Clarification of the Proposal’s Scope

To comply with the APA, an agency engaged in rulemaking must always “examine the relevant data and articulate a satisfactory explanation for its action.” But some statutes—including the Exchange Act—impose additional requirements, for example by instructing agencies to analyze the costs and benefits of their chosen regulatory approach before proposing a new regulation. Under the Exchange Act, the Commission must “consider the effect of a new rule upon ‘efficiency, competition, and capital formation.’” The D.C. Circuit, which reviews a substantial number of Commission rules, has explained that the Exchange Act requires the Commission to “apprise itself—and hence the public and the Congress—of the economic consequences of a proposed regulation before it decides whether to adopt the measure.” Courts closely scrutinize the Commission’s cost-benefit analysis and have repeatedly vacated Commission rules for failing “adequately to assess [their] economic effects.”

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91 See id. at 43.
92 See supra Section II.A.
96 Business Roundtable v. SEC, 647 F.3d 1144, 1148 (D.C. Cir. 2011) (quoting 15 U.S.C. § 78c(f)). The Exchange Act states, “Whenever pursuant to this chapter 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 protection of investors, whether the action will promote efficiency, competition, and capital formation.” 15 U.S.C. § 78c(f).
98 Business Roundtable, 647 F.3d at 1148; see, e.g., Chamber of Commerce, 412 F.3d at 144; American Equity Inv. Life Ins. Co. v. SEC, 613 F.3d 166, 176-79 (D.C. Cir. 2010).
So long as the Commission leaves the scope of its Proposal ambiguous, DeFi systems will bear the costs of regulatory uncertainty imposed by the expanded definition of “exchange.” This uncertainty is magnified by the recent Commission proposal to clarify the definition of “dealer,” which does directly address the proposed rule’s application to digital assets, and therefore raises fresh doubts about the intended breadth of the Proposal at issue here. Without further guidance from the Commission, DeFi systems may be unsure whether they fit within the new category of “Communication Protocol Systems” that the Commission has included in its redefinition of “exchange.” These systems may also be uncertain as to whether the Commission views the digital assets their users transact in as securities in the first place, a threshold determination the Commission must make before exercising its authority as a regulator of securities exchanges.

These uncertainties threaten to impose costs on DeFi systems, which must evaluate their own exposure and—if possible—even resort to protective registration to avoid facing penalties for noncompliance. In response to the overbroad Proposal, some systems will assess that they fall outside of the proposed rule, and others will attempt to register as broker-dealers even though they may not have to. Still others will shut down their activities out of fear they cannot comply with the ill-fitting regulatory framework extended by the rule. And others might recognize the futility of attempting compliance and take no action at all; that could create unevenness, and thus unfairness, in the regulatory landscape applicable to DeFi systems.

Because the Commission does not assess these costs, its analysis of the Proposal’s likely consequences is incomplete. Even when the costs of a proposal depend in part on actions taken by the regulated entity in response to the proposal, and the Commission therefore “can only determine the range in which [the entity’s] cost of compliance will fall,” the Commission must “determine as best it can the economic implications of the rule it has proposed.” To fully account for the economic implications of the Proposal, the Commission should have squarely addressed whether and how the rule applies to DeFi systems. At the very least, however, the Commission was required to acknowledge the costs imposed by continued uncertainty. It did not do so. The Commission should therefore clarify that the Proposal does not extend to DeFi systems.

B. If the Commission Intends the Proposal to Cover DeFi Systems, it Must Repropose the Rule to Address the Proposal’s Implications for Those Systems

The Commission has not explained how it would justify extending the existing framework of exchange or broker-dealer registration to DeFi systems. The serious practical difficulties and costly uncertainty that would result from doing so without further elaboration

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99 See supra Part II.
100 See supra note 13 and accompanying text.
101 This uncertainty could also harm competition. See Recent Guidance: SEC, Framework for “Investment Contract” Analysis of Digital Assets (2019), 132 HARV. L. REV. 2418, 2423 (2019) (“[L]ack of regulatory clarity may be a barrier to entry and give market participants less appetite to take risks. The uncertain landscape likely dampsens innovation in blockchain technology.”)
102 Chamber of Commerce, 412 F.3d at 143.
suggest that the Commission should declare DeFi systems excluded from the Proposal. But given the breadth of the Proposal, and the hints that Commissioners have dropped about their views of digital asset trading platforms, the public cannot discount the possibility that the Commission intends silently to sweep DeFi systems into its regulatory ambit. If the Commission aims to regulate DeFi systems, it should propose a new rule that is tailored to address the innovations of truly decentralized systems and the practical limitations of extending exchange or broker-dealer registration requirements to these systems. If the Commission instead plans to proceed with regulating DeFi systems as exchanges or broker-dealers, it must, at the very least, forthrightly address the Proposal’s implications for those systems. It must therefore repropose its rule. In doing so, the Commission should analyze the Proposal’s economic effects on DeFi systems, evaluate reasonable alternatives to regulating DeFi systems as exchanges or broker-dealers, and allay any concerns that the Commission will exceed its statutory or constitutional authority.

1. The Commission Did Not Account for the Proposal’s Economic Effects on DeFi Systems

In order to satisfy its “obligation to consider the economic implications” of a proposed rule, the Commission must assess the likely costs and benefits of the rule, as measured against the existing regulatory regime. It must therefore determine whether the current framework is sufficiently efficient, competitive, or conducive to capital formation. The agency must then adequately quantify the certain costs of its proposed regulatory framework or explain why those costs could not be quantified. Even if the costs of a proposal may be difficult to calculate with precision, the Commission must “determine [them] as best it can.” The Commission cannot “inconsistently and opportunistically frame” the costs and benefits of the rule.” Nor can the Commission “duck[] serious evaluation of the costs that could be imposed upon companies” under its Proposal.

The Commission purports to weigh certain costs and benefits of its Proposal. But, as described above, the agency does not expressly grapple with the Proposal’s economic implications for DeFi systems. If the Commission intends for the Proposal to extend to DeFi systems, it must assess the costs and benefits of sweeping DeFi systems into the framework governing exchanges and broker-dealers.

The Commission’s description of the proposed rule’s expected benefits highlights the shortcomings of its cost-benefit analysis: The agency touts greater security and transparency for market participants, as well as a robust audit trail and a reduction in search and trading costs for consumers. But the Commission does not mention the innovations at DeFi’s core, from

\[103\] American Equity Inv., 613 F.3d at 177-79.
\[104\] Business Roundtable, 647 F.3d at 1149.
\[105\] Chamber of Commerce, 412 F.3d at 143.
\[106\] Business Roundtable, 647 F.3d at 1148-49.
\[107\] Id. at 1152.
\[109\] See id. at 15,618-15,623.
blockchain-enabled public ledgers to the frictionless, permissionless, and trustless smart contracts that power decentralized exchanges.\textsuperscript{110} That means that, if the Commission did intend to capture DeFi systems, the agency did not properly assess the baseline against which its proposed regulation operates.\textsuperscript{111}

At the same time, the Commission underestimates the costs that the proposed rule will impose. Because the Commission does not clearly state whether the Proposal applies to DeFi systems, it does not account for the burdens that these systems might be forced to take on. The Proposal does not, for instance, estimate the costs that DeFi systems could face in implementing the required data collection and disclosures, registering as an exchange or broker-dealer, or complying with the fair access rule. Nor does the Proposal account for the fact that compliance will be difficult, if not impossible, for DeFi systems to accomplish. In navigating the practical challenges imposed by the new rule, DeFi systems will incur costs that the Commission has not considered, let alone justified.

The Commission’s evaluation of the Proposal’s effect on efficiency, competition, and capital formation raises similar concerns. In assessing whether the rule’s inclusion of systems offering communication protocols would promote competition or, by contrast, stifle innovation and drive systems to exit the market, the Commission writes that it “does not have information on the extent to which an existing Communication Protocol Systems would potentially need to alter its operations or business model as a result of the proposed amendments to Rule 3b–16 and Regulation ATS.”\textsuperscript{112} As such, the Commission cannot properly assess the factors that would determine how the Proposal would affect competition.\textsuperscript{113} The Commission’s efficiency and capital formation analysis are, moreover, premised entirely on its conclusion that the Proposal may “reduce trading costs for market participants.”\textsuperscript{114} As explained above, however, the Commission takes into account neither the existing DeFi landscape nor the proposed rule’s effect on market participants in that ecosystem.

Recent statements from Chair Gensler have, in fact, raised serious concerns about whether the Commission examined the Proposal’s possible consequences for DeFi systems at all. In April 4, 2022 remarks at the Penn Law Capital Markets Association Annual Conference, Chair Gensler recognized that both centralized and decentralized platforms enabling crypto transactions are different from traditional securities exchanges and that the Commission staff is still in the process of evaluating how those platforms might fit into the agency’s regulatory ambit.\textsuperscript{115} The Proposal therefore risks jumping the gun on the Commission’s ongoing efforts to determine if and how its existing rules apply to DeFi systems.

Assuming it was the Commission’s intent to capture DeFi systems, the Commission did not explain its puzzling omission of any discussion related to DeFi or its failure to estimate the likely costs that those systems would face under the proposed rule. The Commission’s choice to

\textsuperscript{110} See supra Section I.B.1.
\textsuperscript{111} See American Equity Inv., 613 F.3d at 177-79.
\textsuperscript{112} 87 Fed. Reg. at 15,634.
\textsuperscript{113} Id.
\textsuperscript{114} Id. at 15,639.
\textsuperscript{115} See Gensler, supra note 15.
elide these economic implications is worrisome. In her dissent, Commissioner Peirce emphasized that Proposal could “deter innovation and dissuade new entrants from entering the market.” And in public commentary, she highlighted how the proposed rule could sweep in DeFi protocols. That these concerns were top-of-mind for Commissioner Peirce suggests that they should have been addressed in the Proposal. Agencies, of course, do not have to be omniscient. But regulators must forthrightly examine the relevant data and must articulate the gaps in their own knowledge.

The Commission should correct its failure to measure the costs of potentially sweeping DeFi systems into the regulatory framework governing exchanges and broker-dealers. To validate the Proposal’s current cost-benefit analysis, the Commission could expressly state that the rule does not extend to DeFi systems or protocols. But without such a clarification, the Commission’s evaluation of the proposed rule’s economic implications will remain fundamentally unsound. The Commission could fix this error by reproposing the rule and including a comprehensive analysis of the costs and benefits of regulating DeFi systems as exchanges or broker-dealers, recognizing that these costs may be magnified by lingering uncertainty as to whether the digital assets traded through these systems are in fact securities subject to the Commission’s jurisdiction. Only then could the public meaningfully participate in this rulemaking process.

2. The Commission Did Not Consider Reasonable Alternatives that Would Have Furthered its Goals Without Threatening to Burden DeFi Systems

An agency has a duty to consider reasonable alternatives to its chosen regulatory approach. Before it promulgates a new rule, “an agency must cogently explain why it has exercised its discretion in a given manner”; any “alternative way of achieving the objectives of the Act should [be] addressed and adequate reasons given for its abandonment.” Failure to weigh an alternative that is “neither frivolous nor out of bounds” would violate the APA.

The Commission briefly describes the alternative proposals it rejected. But there is no indication in the proposed rule that the Commission considered an approach that would lessen burdens on DeFi systems, if it was in fact the Commission’s intent to cover these systems. Rather, the Commission identifies alternatives that would have tinkered around the edges of the

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116 Peirce, supra note 31.
117 Allyson Versprille, SEC’s Lone Republican Warns of Threat to Crypto DeFi Platforms in New Agency Plan, BLOOMBERG (Feb. 1, 2022), https://www.bloomberg.com/news/articles/2022-02-01/sec-s-peirce-sees-threat-to-crypto-defi-platforms-in-agency-plan?ref=3REHEaVI. (“The proposal includes very expansive language, which, together with the chair’s apparent interest in regulating all things crypto, suggests that it could be used to regulate crypto platforms…. The proposal could reach more types of trading mechanisms, including potentially DeFi protocols.” (quoting Cmm’r Hester M. Peirce)).
118 Fox Television Stations, 556 U.S. at 513.
119 State Farm, 463 U.S. at 46-49.
120 Id. at 48.
121 Chamber of Commerce, 412 F.3d at 145.
public disclosure obligations applicable to Communication Protocol Systems; or subjected fewer Communication Protocol Systems to the Fair Access Rule; or codified a result that the Commission already anticipates by requiring Communication Protocol Systems to register as broker-dealers rather than exchanges.

If it intended to capture DeFi systems, the Commission could have considered a number of alternatives that would have furthered the agency’s goals without unnecessarily undermining the success of DeFi systems. For example, rather than extend the definition of exchange to all entities swept up by the new category of “Communications Protocol Systems,” the Commission could have targeted the centralized systems actually capable of compliance with the Proposal’s requirements. The Commission could have even proposed a new framework for regulating systems that use non-firm trading interest, rather than attempting to extend the inapt order-based regime governing broker-dealers. The Commission could have also worked with industry stakeholders to design a more native regulatory structure for DeFi systems, instead of using the overbroad label of “Communication Protocol Systems” and risk subjecting those systems to a poorly tailored compliance regime. Along these lines, a16z has proposed a framework that leverages smart contracts to produce automatic disclosures, furthering the Commission’s efficiency and investor protection goals.

Another option would be the establishment of a DeFi SRO in the form of a DAO. In contrast to broker-dealer registration and governance under FINRA, automatic oversight by a DAO SRO would protect investors while utilizing the innovative technology that powers DeFi systems. These represent only a sampling of the promising alternatives that the Commission should have considered. And those alternatives were neither “uncommon or unknown” to the Commission; the Commission has been openly debating how to address DeFi, and public commentators— including Commissioner Peirce—immediately recognized the Proposal’s troubling implications for DeFi systems. The agency

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123 Id. at 15,639-15,640, 15,642-15,643.
124 Id. at 15,641.
125 Id. at 15,642. The Proposal states, “The Commission assumes that, under the proposed amendments, Communication Protocol Systems would choose to register as broker-dealers and comply with Regulation ATS, rather than register as exchanges.” Id. at 15,634 n.1153.
126 See supra notes 66-69 and accompanying text.
127 See supra Section I.B.4.
128 a16z has presented further proposals to the Senate Committee on Banking, Housing, and Urban Affairs. See supra note 8 and accompanying text.
129 Chamber of Commerce, 412 F.3d at 144 (citing State Farm, 463 U.S. at 51).
was therefore obligated to explain why it declined to pursue those alternatives. Because the Commission failed to consider those reasonable alternatives to its chosen approach or to reasonably explain why it rejected them, the proposed rule likely runs afoul of the APA.

3. The Commission Could Exceed Its Statutory Authority by Expanding the Definition of “Exchange” to Include DeFi Systems

In proposing to expand the definition of “exchange” to cover any system that “makes available” “communication protocols” to bring together the orders of buyers and sellers based on “trading interest,” the Commission risks exceeding its authority under the Exchange Act. If the Commission intends the Proposal to capture DeFi systems, it must grapple with the limits of the power delegated to it by Congress.

The burdens that the Proposal could impose on DeFi systems are not clearly connected to the Commission’s statutory duty to define and regulate securities exchanges. Commissioner Peirce’s dissent highlights just how far the proposed rule extends, explaining that it “goes far beyond the scope” of previous agency proposals and may sweep in “those who operate any service that is designed to facilitate any communication between potential buyers and sellers of any type of security.” The Proposal, in turn, disclaims any limitations on the scope of the proposed rule. It purports to allow the Commission to regulate “any system … notwithstanding how thinly traded or novel a security may be.” As described above, the Proposal could even be read to extend to systems that allow trading in digital asset securities, despite the fact that the Commission has only provided broad guidance for determining when a digital asset is a security.

The Commission’s proposed redefinition of “exchange” would expand the Commission’s power across multiple dimensions. An exchange would no longer need to actively employ any method of order-matching; it would need only to “make[] available” methods of bringing users together. What’s more, an exchange would not need to offer a means of matching “orders” at all; the system would fall within the Commission’s purview so long as it united buyers and sellers based on non-firm “trading interest” alone. Finally, the Commission proposes to adopt a broad new category of “established methods” that exchanges might use to facilitate trades—“communication protocols”—that is found nowhere in the text of the Exchange Act. The scope of the Commission’s discretion under the Proposal is broader still: The Proposal offers only “a non-exhaustive list of some Communication Protocol Systems” and notes that “the

132 87 Fed. Reg. at 15,646.
133 Peirce, supra note 31.
135 See supra Section II.B.
137 Id. at 15,504-15,505.
138 Id. at 15,506-15,508.
determination of whether the system [falls under the definition of ‘exchange’] would depend on the particular facts and circumstances of each system.”  

Requiring DeFi systems to register as securities exchanges or broker-dealers would reflect a significant expansion of the Commission’s authority that is not clearly within the bounds of the agency’s statutory authority. The Proposal may therefore run headlong into the “major questions” doctrine, which recognizes that agencies cannot issue sweeping rules of great economic and political significance unless plainly authorized to do so by statute. The Supreme Court has, in fact, routinely held that agencies cannot issue rules that claim jurisdiction over areas not expressly covered by the statutory text the agency purports to interpret. Were the Commission to impose on DeFi systems the same registration, data collection, and disclosure requirements that apply to securities exchanges, it would stifle one of the fastest growing, most innovate sectors of the modern economy. The Exchange Act likely does not grant the Commission that power—either by implication, or through the type of clear statement that courts require.

4. The Commission Could Raise Serious Constitutional Questions by Burdening Protected Expression and Imposing Unprecedented Disclosure and Data Collection Requirements on DeFi Systems

Courts must set aside agency rules that are “contrary to constitutional right, power, privilege, or immunity.” Requiring DeFi systems to register as exchanges or broker-dealers could burden protected speech of DeFi users and strike at the heart of the innovations that have allowed DeFi to flourish, raising serious constitutional questions. After all, the Proposal makes clear that the requirements of exchange or broker-dealer registration will be triggered not only by traditional trading conduct (order-matching), but also by protocols that permit system users to engage in protected expression: Systems will be targeted if they “prompt and guide buyers and sellers to communicate, negotiate, and agree to the terms of the trade.” This pivot from

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139 Id. at 15,500, 15,507.
140 See Nat’l Fed’n of Indep. Bus. v. Dep’t of Labor, Occupational Health & Safety Admin., 142 S. Ct. 661, 665 (2022) (per curiam) (“NFIB”) (“We expect Congress to speak clearly when authorizing an agency to exercise powers of vast economic and political significance.”) (quotation omitted); King v. Burwell, 576 U.S. 473, 486 (2015) (noting, when confronted with “a question of deep ‘economic and political significance,’” that, “had Congress wished to assign that question to an agency, it surely would have done so expressly.”); See also NFIB, 142 S. Ct. at 667-680 (Gorsuch, J., concurring) (discussing the “‘major questions’ doctrine”).
141 See, e.g., NFIB at 665 (per curiam) (APA challenge to OSHA rule); FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120 (2000) (“Given the economic and political significance of the tobacco industry at the time, it is extremely unlikely that Congress could have intended to place tobacco within the ambit of the [statute] absent any discussion of the matter.”); MCI Telecomms. Corp. v. Am. Tel. & Tel. Co., 512 U.S. 218, 231 (1994) (finding it “highly unlikely that Congress would leave the determination of whether an industry will be entirely, or even substantially, rate-regulated to agency discretion” through a “subtle device” in statutory text).
regulating noncommunicative conduct to regulating expression implicates the First Amendment. 144

By extending novel data collection and reporting requirements to DeFi systems, the Proposal may implicate the Fourth Amendment as well. DeFi systems offer powerful new privacy protections that are not available through systems that rely on centralized intermediaries. As a16z has previously noted, regulations that seek to take away that shield of privacy in order to enable government surveillance of market participants raise serious concerns under the Fourth Amendment. 145 The Proposal marks a worrisome move in that direction by imposing substantial data collection obligations on the systems that will be required to newly register as exchanges or broker-dealers. In forcing systems to compile information about participants who may be merely communicating about non-firm “trading interest,” the Proposal could in practice require “compelled collection … of user records” without adequate justification. 146

C. The Commission’s Abbreviated Comment Period Provides Inadequate Opportunity for Meaningful Comment on a Rule of This Scope

The Commission provided only 30 days for interested parties to comment on the Proposal, which includes 224 questions on which the Commission is seeking public input. 147 The Proposal is, moreover, only one among a slate of rulemakings undertaken by the Commission in recent months that require the careful attention of industry stakeholders. 148 Given this stack of overlapping proposals, each of which have similarly short comment windows, the Commission risks denying the public the full and fair opportunity to engage in the rulemaking process that is guaranteed by the APA.

An agency engaged in rulemaking must “give interested persons an opportunity to participate.” 149 This notice requirement is “designed (1) to ensure that agency regulations are tested via exposure to diverse public comment, (2) to ensure fairness to affected parties, and (3) to give affected parties an opportunity to develop evidence in the record to support their

146 See id. at 15,496, 15,644.
149 5 U.S.C. § 553(c).
objections to the rule and thereby enhance the quality of judicial review.” By providing only 30 days for interested parties to comment on the Proposal, the Commission strays from these goals.

Thirty days is “generally the shortest time period” that meets the APA’s notice requirement. And in some cases, 30 days is insufficient for “interested persons to meaningfully review a proposed rule and provide informed comment.” Accordingly, “the government’s own internal orders state that a comment period... should generally be at least 60 days.” Courts have identified specific instances in which a 30-day comment period may be too short. For instance, “where the executive branch engages in a slew of interrelated rulemaking activity, 30 days is likely insufficient to provide a meaningful opportunity to comment on a highly technical and complex regulation.” An agency’s “fail[ure] to consider the combined impact” of its interrelated rules may show that it “entirely failed to consider an important aspect of the problem” before it.

Commissioner Peirce highlighted this issue in her dissenting statement, expressing serious dismay about the 30-day comment period set by the Commission and the worrying trend of Commission rulemakings that afford little opportunity for public comment. Given the Proposal’s complexity, she emphasized that “[n]inety days would have been a reasonable period” for public comment and “[a]ny shorter period would not be sufficient” in her view.

When the Commission released its proposal, Chair Gensler answered Commissioner Peirce’s objection to the abbreviated comment period by noting that the 30-day clock would not start until publication in the Federal Register, and that a publication backlog would thus create a meaningful de facto comment period. That does not, however, resolve the concerns raised about the agency’s rulemaking process. The text of the APA measures the opportunity for public input provided after notice is published in the Federal Register, meaning that the statute does not

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151 Nat’l Lifeline Ass’n v. FCC, 921 F.3d 1102, 1117 (D.C. Cir. 2019).
152 Catholic Legal Immigration Network, Inc. v. Exec. Office for Immigration Review, 2021 WL 3609986, at *3 (D.D.C. Apr. 4, 2021) (quoting Nat’l Lifeline Ass’n, 921 F.3d at 1117); see also Centro Legal de la Raza v. Exec. Office for Imm. Rev., 524 F. Supp. 3d 919, 955 (N.D. Cal. 2021) (“In light of the breadth and import of the new regulations, a 30 day comment period is extremely limited, a point noted by numerous commenters.”); Pangea Legal Servs. v. U.S. Dep’t of Homeland Sec., 501 F. Supp. 3d 792, 819 (N.D. Cal. 2020) (“[T]hirty days for a rule of this magnitude, both in terms of the changes proposed and the importance of the subject matter, is a ready short.”).
155 Id. at 962.
156 Peirce, supra note 31.
157 Id.
158 See Open Meeting, U.S. SEC. & EXCH. COMM’N, at 57:30 (Jan. 26, 2022), https://www.youtube.com/watch?v=rFfEhUjtrN0 (statement of Chair Gensler) (“It’s just a pragmatic reality that it’s a lot longer than 30 days.”).
take into account the effect of the publication backlog that Chair Gensler cites. The resulting de facto comment period, moreover, still gives short shrift to public input. Commissioner Peirce warned that the Commission was engaging in a “precipitous rush to plow through the comment period” and highlighted how a rushed effort “presents a greater immediate risk to the market than any of the issues that have led to [the Proposal].” She concluded that any comment period shorter than 90 days “would not be sufficient to give [her] the confidence that the Commission was receiving sufficient public analysis and comment to enable [the Commission] to proceed to adoption in a manner consistent with [its] responsibilities to the market, to the law, or to the American people.” Chair Gensler’s de facto comment window falls short of this baseline.

Unless the Commission provides additional opportunity for comment, the public will be denied an opportunity to meaningfully participate in the rulemaking process. Many comments have implored the Commission to extend the comment period, noting that industry stakeholders realistically need more time to analyze and respond to the expansive Proposal. These comments “reflect the inability to comment meaningfully within [a] brief time,” suggesting that the comment period is too short. This concern is amplified by the Commission’s decision not to explicitly analyze the proposed rule’s possible implications for DeFi systems, as interested parties must accordingly read between the lines to understand the Proposal’s full scope. The Commission should therefore clarify whether the Proposal applies to DeFi systems—and if so, how. If the Commission does intend DeFi platforms to be covered by the proposed rule, it must then repurpose its rule and offer a new opportunity for the public to comment on the DeFi-specific features of the updated Proposal. Absent such corrective action, the Commission will not be able to “act on the basis of up-to-date, more comprehensive, and specifically targeted information,” and its rush to enact the Proposal may ultimately be counterproductive.

CONCLUSION

a16z appreciates the opportunity to share its perspective on the Commission’s proposal to expand the definition of “exchange” and amend Regulation ATS. Because the Proposal risks imposing substantial burdens on DeFi systems without analyzing their practical and economic implications, we respectfully request that the Commission revise its proposed rule to clarify that DeFi systems are not in its scope, or alternatively, repropose the rule with a cost-benefit analysis expressly evaluating its effects on DeFi systems. Any proposed rule that intends to regulate DeFi systems should be tailored to the opportunities and risks presented by truly decentralized systems. Accordingly, rather than extend the requirements of exchange or broker-dealer...
registration to the broad universe of Communication Protocol Systems, the Commission should consider more targeted regulation of the traditional, centralized systems that truly operate as securities exchanges. But if the Commission seeks to extend the existing regulatory framework governing exchanges and broker-dealers to DeFi systems transacting in digital asset securities, it must provide a meaningful analysis of the costs and benefits of the applicability of the rule to this ecosystem, as required by the APA.

Policy questions about the proper regulation of DeFi systems are serious and they should be addressed openly and on the basis of a complete record of the costs and benefits of regulation; not decided opaquely or implicitly in a broader overhaul of Exchange Act regulations. The opportunities and challenges presented by the growth of DeFi systems require regulations that take into account the promises of decentralization and preserve our nation’s competitive edge. a16z is ready to serve as partner in crafting these solutions.

Respectfully submitted,

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