DeFi Education Fund

April 18, 2022

Via Electronic Mail: rule-comments@sec.gov

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

Re: Notice of Proposed Rulemaking 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; File No. S7-02-22

Dear Ms. Countryman:

The DeFi Education Fund[1] ("**DEF**") appreciates the opportunity to provide comments to the Securities and Exchange Commission ("**SEC**" or "**Commission**") on its proposed "Amendments to Exchange Act Rule 3b-16 Regarding the Definition of Exchange," Release No. 34-940602 (January 26, 2022) ("**Proposal**"). This letter addresses those aspects of the SEC's proposed amendments to Rule 3b-16 that would revise certain terms used in the statutory definition of an "exchange" under Section 3(a)(1) of the Securities Exchange Act of 1934 ("**Exchange Act**").

Although we support the Commission's overall goals of levelling the competitive landscape and promoting investor protection in light of technological developments, we have significant concerns about the Proposal as written. As discussed below, the Proposal is so broad and vague in a number of important respects that it could stifle a wide range of beneficial technological advances, which would harm both U.S. market participants and the United States' competitive position in global markets.

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[1] DEF is a nonpartisan advocacy group based in the United States with a mission to educate policymakers about the benefits of decentralized finance and to achieve regulatory clarity for the DeFi ecosystem.

It is especially unclear whether the Proposal would regulate participants in the digital assets and decentralized finance ("**DeFi**") ecosystem. If the Commission intends in this rulemaking (which never once mentions DeFi or digital assets) to address participants in this ecosystem, it should instead do so with proper notice and as part of the coordinated, deliberate, and multi-agency approach President Biden ordered on March 9, 2022.[2]

OVERVIEW

The Proposal would generally require an organization, association, or group of persons to register as either a national securities exchange (like NYSE and Nasdaq) or a broker-dealer/alternative trading system ("**ATS**") (like BrokerTec or Instinet) if it brings together parties expressing "trading interest" in securities and "makes available" certain methods under which buyers and sellers can interact and agree to the terms of a trade. Historically, these methods cover trading facilities and rules-setting bodies such as stock exchanges. The Proposal would expand the scope of these methods to include—for the first time—a broad range of communication systems (referred to as "**Communication Protocol Systems**" or "**CPSs**").

The stated aim of the Proposal is to update the regulation of exchanges and ATSs to address technological developments. We value the Commission's effort to provide legal certainty and notice for market participants in a changing environment. We also support the Commission's objective of creating a more level competitive landscape by regulating like systems consistently without favoring any specific market structure, technology, or manner of trading.

Unfortunately, the Proposal falls well short of these objectives. Using the broad concepts of "trading interest" and "communication protocols" to radically expand exchange and broker-dealer/ATS registration requirements would not level the competitive landscape. Rather, it would advantage traditional financial services companies by potentially applying the same regulations to fundamentally dissimilar technologies. It would also upset, without clear benefit, the previously settled expectations of market participants and investors by rendering obsolete a long line of Commission no-action letters on which the securities industry has relied for decades. That the Commission felt the need to clarify that web-chat providers like Facebook Messenger, and utilities like cell phones, would not be required to register as securities exchanges raises critical questions about the Proposal's scope.[3] The vagueness and uncertainty the Proposal would introduce into the securities laws would stifle innovation and impose significant burdens on market participants and investors seeking to comply with the law.

We find even more troubling the proposal to regulate as exchanges those who "make available" a "communication protocol" that could be used in connection with trading

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2 *See* Executive Order on Ensuring Responsible Development of Digital Assets (Mar. 9, 2022), *available at* https://www.whitehouse.gov/briefing-room/presidential-actions/2022/03/09/executive-order-on-ensuring-responsible-development-of-digital-assets.

3 Proposal, 87 Fed. Reg. 15496, at p. 15502 (Mar. 18, 2022).

activities. Would this aspect of the Proposal require original developers of a software that could be used for trading to register as an exchange, even if they have no ongoing involvement with or control over the transactions using the software? What about a vendor who sells the software? A contractor who maintains the software? Requiring any of these parties to register with the Commission and take responsibility for recording, reporting, and policing transactions in which they have no actual role would be misguided and unworkable. It will result only in the restriction or elimination of important technological development in the U.S., on which many market participants have come to rely, in turn undermining U.S. investors and the United States' economic competitiveness.

Even if we could understand the new "exchange" definition's limits, regulating CPSs under exchange/ATS rules is impracticable and will not achieve the Commission's stated objectives. There are fundamental structural differences between businesses historically regulated as exchanges and ATSs and those the Proposal may capture. Exchanges and ATSs generally enable market participants to buy and sell listed securities and provide execution functionality and other related services, and exchanges have robust governance systems with well-defined rules. Those functions are not offered by, and cannot be offered by, the CPSs that may be regulated by the Proposal. The key functional differences between traditional trading platforms and CPSs create different risks, which should be mitigated through nuanced rules tailored to each type of service provider.

Moreover, the Proposal's definition of an exchange is so expansive that, without further guidance from the Commission, the Proposal could be interpreted to regulate certain DeFi protocols. Unlike proprietary software, these protocols are open source, with governance typically exercised by the broad community of users interacting through technology, rather than by a central operator or governing body; in some instances, there is no governance structure at all. We assume that the Commission does not intend to capture these protocols for several reasons: *first*, because of the substantive issues of regulating decentralized markets using a registration framework that assumes centralized control; *second*, because of the lack of supporting analysis and the fact that the 591-page Proposal does not reference these protocols at all; *third*, because of the significant procedural and substantive impediments the Proposal would face under the Administrative Procedure Act, the Exchange Act, and potentially the U.S. Constitution; and, *fourth*, as explained below, because DeFi protocols do not present the same risks as traditional financial institutions regulated as exchanges and ATSs. Given the expansive scope of the Proposal, however, and its uncertainties and ambiguities, we urge the Commission to clarify and confirm that DeFi protocols are not within the scope of the proposed rules.

Foisting unworkable registration requirements on DeFi protocol developers or other market participants—designating them as financial intermediaries even though they do not play an intermediating role or exercise control over participants or trading —would cause great harm to U.S. financial market participants. These protocols provide investors the important benefits of transparency, fair and open access, constant uptime, elimination of broker risks and reduced costs, among others. But the Proposal could be read to ban this beneficial market

structure innovation, as well as a wide range of established communications and software tools that have never been, and should not be, regulated as exchanges. Simply put, the Commission has not justified, and cannot justify, such a sweeping change. Requiring DeFi protocol developers or other market participants to register as exchanges or broker-dealer/ATSs would advantage existing incumbents and technologies while stunting continued modernization of the U.S. securities markets, to the detriment of all market participants and to the benefit of competing markets abroad.

We respectfully urge the Commission to take these considerations into account and restructure the Proposal by adopting an approach that is tailored to the Commission's expressed concerns and objectives.

DISCUSSION

I. Overview of Decentralized Finance

A. General Background of Decentralized Finance

DeFi is an umbrella term used to describe decentralized software protocols that can be used to conduct economic activities on blockchain networks. DeFi protocols provide open, transparent access to various types of financial services without requiring or even needing centralized intermediaries or institutions. Instead of relying on centralized intermediaries to establish trust between counterparties in financial transactions, DeFi systems establish trust via rules-based, encoded protocols that allow individuals to transact via blockchain networks.

A subset of DeFi protocols—commonly called "decentralized exchanges" or "DEXs"—allow parties to buy and sell a variety of digital assets, some of which may be securities. These protocols do not rely on banks, brokers, centralized execution, or clearing functions as intermediaries, but rather utilize open-source software running on distributed ledgers, *i.e.* "blockchains." Public blockchains are permissionless, decentralized, and immutable ledgers that enable all nodes on a network to (1) hold a record of the history of transactions on the network and (2) reach consensus as to the validity of those transactions. No single entity participating in the network has control over, or can alter, that ledger of transactions. Smart contracts are a type of software program that run on public blockchains. Smart contracts can be designed to automatically execute specific actions without the involvement of a third party when certain conditions are met. These software programs, *i.e.* DEXs, allow parties to exchange digital assets directly without any financial intermediary's involvement.

DeFi protocols such as DEXs aim to address several challenges and risks inherent in the structure of the traditional financial industry, namely, limited access, slow settlement cycles, inefficient price discovery, liquidity challenges, a lack of assurance around underlying assets, opaqueness, broker risk and uptime issues. DeFi protocols can be distinguished from traditional exchanges and other market infrastructures in several ways. For example, assets are

held directly by users in self-hosted wallets or through smart contract-based escrow[4] rather than by a centralized service provider or custodian in an account on the asset owners' behalf. Wallets managed by a smart contract offer users additional protections, such as multi-signature authorization for transactions, which requires two or more users to authenticate a transaction before it can be executed, and emergency account freezing when a device is lost or stolen. Second, execution occurs using software (smart contracts) rather than financial intermediaries. Smart contracts deployed on a blockchain are transparent, secure, and immutable.[5] Additionally, rather than relying on a centralized service provider, operator, or self-regulatory organization that ultimately exercises discretion and dominion over the marketplace, DeFi protocols are governed by open-source code initially set by protocol developers and later determined by a large number of distributed users holding tokens granting voting power (known as governance tokens). Though DeFi governance is evolving, on-chain governance methods, such as enabling users to vote for and implement proposed changes directly on the blockchain, including the disbursement of governance tokens, are emerging methods for governing protocols fairly and transparently.

By allowing market participants to transact directly utilizing open-source software, DeFi protocols provide the following benefits to consumers:

- Increased Transparency: DeFi protocols increase operational transparency about the mechanics of market infrastructures and associated fees by using open-source software, which makes transactions more transparent and auditable by using blockchain-based records.

- Equitable Market Access: DeFi protocols are open and available to anyone in the world with an internet connection, giving them the potential to significantly expand access to financial services.[6] That access empowers more people to use financial services without having to go through intermediaries that may prevent sectors of the market from participation, either through unavailability, absolute prohibitions, excessive pricing, or unfair or discriminatory treatment.

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4 Before making a transaction, tokens are transferred to a smart contract called escrow. The escrow holds the deposited tokens until the payment conditions are satisfied. The escrow is not controlled by any designated third party.

5 Users may create intermediary or proxy contracts that redirect calls and transactions to a modified contract as a way of updating an earlier contract.

6 *See, e.g.,* Bitange Ndemo, The role of cryptocurrencies in sub-Saharan Africa, Brookings Institution (March 16, 2022), https://www.brookings.edu/blog/africa-in-focus/2022/03/16/the-role-of-cryptocurrencies-in-sub-saharan-africa.

- 24/7/365 Liquidity: Users can access and use markets at all times of the day without the need for closing markets at the end of each day. Among other things, this eliminates the risk of capital dislocations due to illiquid aftermarket trading in traditional systems.

- Lower Costs and Faster Settlement: DeFi protocols reduce friction and transaction costs for the creation, distribution, trading, and settlement of financial assets with faster settlement times for users.[7]

- Improved Security: Transactions using DeFi protocols are recorded on blockchains, the records of which cannot be manipulated or amended, offering greater security to users.

- Greater Control: The absence of intermediaries in DeFi protocols provides stakeholders greater control and certainty. Additionally, in some instances, market participants can directly develop community-governance standards.

- Greater Uptime: Permissionless blockchains are operationally resilient (the Ethereum blockchain has never gone down), whereas traditional exchanges have had major technology failures, resulting in downtime for securities markets. Additionally, the use of certain DeFi protocols referred to as automated market makers eliminates trading halts that occur at times as a result of buy and sell order imbalances.

- Eliminate Broker Risk: DeFi protocols have no employees to supervise, no financial risk for users from broker activity or custody, and no interaction between a broker and customers that could result in unlawful sales practices or other unfair and discriminatory dealing.

- Eliminate Anti-Competitiveness: Users can easily move their cryptocurrencies from one protocol to another at any time without significant friction, unlike the experience on traditional exchanges where sharing liquidity across exchanges is near-impossible, resulting in a lack of competition.

DeFi protocols are already making substantial contributions to financial innovation generally and in the U.S. specifically. The Official Monetary and Financial Institutions Forum recently observed that DeFi is being harnessed for the public good and has spurred innovation in the banking system.[8] Academic scholarship has discussed how DeFi protocols benefit efficiency,

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7 To be sure, users of DeFi protocol may pay certain fees, such as gas fees, to facilitate use of the protocol. But any comparison of costs should also account for the fact that DeFi users do not additionally need to compensate other intermediaries such as executing brokers, prime brokers, clearing brokers, or custodians. On balance, this leads DeFi protocols typically to be available to users at lower costs than centralized exchanges. As additional blockchains are created and new technology, such as scaling solutions, are developed, costs for transacting using DeFi protocols likely will continue to decrease.

8 Official Monetary and Financial Institutions Forum, *Harnessing Decentralised Finance Innovation for the Public Good* (July 20, 2021), Harnessing decentralised finance innovation for the public good - OMFIF.

by "significantly decreas[ing] counterparty credit risk"; how they benefit transparency, by offering more publicly available data during a crisis than the data "scattered across a large number of proprietary databases or not available at all" in traditional financial systems; how they benefit accessibility, as "the risk of discrimination is almost inexistent due to the lack of identities"; and how they benefit composability, by creating "an ever-expanding range of possibilities and unprecedented interest in open financial engineering."[9]

B. Communication Systems and DeFi Protocols Do Not Operate Like Exchanges or Broker-Dealers

DeFi protocols are more like traditional information-service providers than they are like exchanges, ATSs, or broker-dealers. The Commission has consistently exempted, or granted relief from registration for, entities such as communications service providers, software providers, and data vendors, which provide administrative or technological support to market participants but do not themselves perform the functions of an exchange or ATS.[10] Such entities may provide communication, connectivity, or software services that parties can utilize to communicate trading interest, but they do not match buyers and sellers, intermediate transactions, or perform other functions that introduce unique risks warranting regulation as exchanges or ATSs.[11] For example, communication service providers may provide various services that allow parties to publicize their interest in buying or selling securities, but the providers do not themselves have any role in executing transactions or in the completed transactions following execution and typically cannot even know if transactions have been executed and settled. These service providers have been important sources of support to the financial markets but have not themselves been subject to direct regulation as exchanges or broker-dealers and could not continue to function if they became subject to such frameworks and associated regulatory requirements premised on an intermediary's necessary involvement with transactions.

Even more so than traditional information service providers, DeFi protocols differ fundamentally from exchanges and broker-dealers because the software protocols are not generally subject to centralized control. Even when DeFi protocols originate from a single

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9 Fabian Schär, Decentralized Finance: On Blockchain- and Smart Contract-Based Financial Markets, Federal Reserve Bank of St. Louis Review (Second Quarter 2021), p. 169, https://research.stlouisfed.org/publications/review/2021/02/05/decentralized-finance-on-blockchain-and-smart-contract-based-financial-markets.

10 *See, e.g.,* S3 Matching Technologies LP, SEC No-Action Letter (July 19, 2012); GlobalTec Solutions, LLP, SEC No-Action Letter (Dec. 28, 2005).

11 *See, e.g.,* First of America Brokerage Services, Inc., SEC No-Action Letter (Sept. 28, 1995); Swiss American Securities, Inc. and Streetline, Inc., SEC No-Action Letter (May 28, 2002); FundersClub Inc. and FundersClub Management LLC, SEC No-Action Letter (Mar. 26, 2013); AngelList LLC and AngelList Advisors LLC, SEC No-Action Letter (March 28, 2013).

software developer or small group of developers, they are generally designed to involve governance arrangements that ensure dispersal of control among a decentralized and disaggregated group of unrelated users. As discussed further in Section IV of this letter, such a decentralized model is especially ill suited to existing registration frameworks.

II. The Proposal's Definition of "Exchange" Is Overbroad and Would Ban Beneficial Market Tools and Structures, Thus Harming Market Participants and the United States' Competitive Position Without Protecting Investors or the Market Generally

Under the Proposal, the definition of an exchange would include any organization, association, or group of persons that "(1) brings together buyers and sellers of securities using trading interest; and (2) makes available established, non-discretionary methods (whether by providing a trading facility or communication protocols, or by setting rules) under which buyers and sellers can interact and agree to the terms of a trade."[12] We respectfully submit that this definition is overbroad as a matter of policy, ignores the costs to parties potentially including DeFi protocol developers and other market participants, and exceeds the Commission's statutory and constitutional authority.

A. The Proposed "Exchange" Definition Is Overbroad

The proposed definition of an "exchange" is breathtaking in its scope and may be interpreted to cover a broad range of entities that provide essential support services to financial market participants but have no involvement in or responsibility for the execution of trades between buyers and sellers. The financial services industry, like all advanced industries, relies on specialization and a diverse array of products and services that are essential to its operation. This industry, now more than ever, is extraordinarily dependent on communications and technological services. In particular, modern financial markets require communications systems, data transmission services, software development, and other products and services and could not function without them. None of the entities providing these products or services has ever been regarded or treated as an exchange or ATS and they should not be so regarded going forward.

Parties making available CPSs that aggregate a few different market applications or a single market tool that was developed for only discrete, communicative purposes should not be regulated as exchanges. Even the most comprehensive CPSs should not be regulated as exchanges if they lack features that make traditional regulation sensible, possible, and effective: *ongoing involvement in transactions and the capability to supervise and control trading behavior*.[13] Regulating DeFi protocols or CPSs (or related parties) as exchanges could effectively

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[12] Proposal, at p. 15504.

[13] The Proposal mandates many responsibilities that require a centralized, supervisory organization. *See, e.g.*, Proposal at 48–49 ("A national securities exchange is an SRO and must set standards of conduct for its members, administer examinations for compliance with these standards, coordinate with other SROs with respect to the dissemination of consolidated market data, and generally take responsibility for

operate as a ban, as these entities are incapable of complying with regulations that require them to monitor and oversee participant activity. The Commission concedes that the Proposal is intended to capture CPSs that "take a more passive role"[14] in the market but then proceeds to mandate responsibilities that only a system with an active intermediating role could fulfill. How, for example, could a software developer who contributed code to an open-source project "administer examinations" to ensure compliance with the trading rules of a system that subsequently incorporated that code?[15] How could a chat service ensure "the equitable allocation of fees," as required by a national securities exchange, when that service only facilitates communication?[16] The number of market participants that seem to be captured by the Proposal but are inherently unable to comply with its requirements renders the Proposal fatally overbroad.

In particular, it is concerning that systems providing communication and other financial technology adjacent to trading, such as bespoke direct messaging or market information services, could be captured under the overbroad "makes available" standard of the Proposal. Under the capacious ambit of the new definition, such systems could be considered to "make available" the means for "buyers and sellers" to "interact." However, no matter how far upstream or distinct a system is from an actual trade, the Proposal presumes that many specialized parties in the financial industry warrant the same obligations as a traditional national securities exchange or electronic communication network. Such regulation would be ineffective for systems that cannot control trading activity that occurs without their involvement. Imposing regulation designed for centralized market intermediaries onto systems that function in a fundamentally different manner is simply unworkable in practice.

As discussed, DeFi protocols are a subset of these tools that cannot and should not be regulated as exchanges. DeFi software developers construct protocols that third parties can utilize completely independently of transactions in financial instruments. However, these software developers typically have no involvement in, oversight of, or control over the deployment, trading, resolution, or settlement of instruments that might be transacted using the protocols they have built. Thus, like other software developers, DeFi developers do not and cannot maintain any active oversight of how their software is used after sale, publication, or availability on an open-source network. In these fundamental and critical respects, DeFi software

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enforcing its own rules and the provisions of the Exchange Act and the rules and regulations thereunder. [. . .] Pursuant to Section 6 of the Exchange Act, national securities exchanges must establish rules that generally: (1) are designed to prevent fraud and manipulation, promote just and equitable principles of trade, and protect investors and the public interest; (2) provide for the equitable allocation of reasonable fees; (3) do not permit unfair discrimination; (4) do not impose any unnecessary or inappropriate burden on competition; and (5) with limited exceptions, allow any broker-dealer to become a member.").

14 Proposal, at p. 15506.

15 Proposal, at p. 15508.

16 *Id.*

developers are identical to other software developers that have served the financial services industry for many years. We are concerned that the Proposal's overly broad "makes available" standard could subject them to onerous regulation solely on the basis of having lines of their code subsequently used by unrelated third parties. The Proposal does not provide sensible, limiting language that would cabin the new definition of "exchange" to only those parties involved directly in the transactions or those that exercise actual oversight of transactions.

We understand that many parties potentially covered by the new definition might elect to be regulated as ATSs rather than registering as exchanges, an option available under the proposed regulations.[17] However, registering as an ATS would require compliance with requirements that likewise simply cannot be met by entities the Proposal could capture. One such requirement is Rule 15c3-5, which mandates that ATSs prevent the execution of orders that exceed certain credit or capital thresholds.[18] A software developer that contributes code to an open-source project that subsequently allows third parties to engage in trading activity has no ability to supervise that activity or impose limitations on the types of orders that are entered. Indeed, it is inherent in the concept of decentralization that the developer is not able to do so. The software developer will not possess participant information or supervisory controls, such as the ability to stop trades or exclude certain participants. Moreover, a software developer that registers as an ATS would also be subject to burdensome transaction reporting requirements, which it also will not be able to satisfy. These regulations can be applied only to entities that operate centralized markets and not to a loosely affiliated, hyper-specialized constellation of independent parties and systems.

B. Regulation of DeFi Protocols as Exchanges or ATSs Would Not Benefit Investors

The Proposal runs counter to the objectives recently identified by the Commission's Chair. In a discussion of the "dramatic" evolution of markets "[o]ver the past several decades" that requires "modernizing our rules for today's economy and technologies," Chair Gary Gensler proclaimed a "drive towards greater efficiency through competition and transparency."[19] We respectfully submit that the Proposal will limit competition and transparency by entrenching existing market players and will therefore operate to the detriment of investors and the public. If the Commission's aim is to increase competition and transparency, this Proposal is deficient in all respects, will actually undermine the Commission's stated objectives and requires significant revision.

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17 Proposal, at p. 15586.

18 *See* 17 C.F.R. § 240.15c3-5(c)(1)(i).

19 Gary Gensler, *Prepared Remarks: "Dynamic Regulation for a Dynamic Society" Before the Exchequer Club of Washington, D.C.*, Securities and Exchange Commission (Jan. 19, 2022), https://www.sec.gov/news/speech/gensler-dynamic-regulation-20220119.

The Proposal seems to presume that many communications and software tools can be restructured to forego the innovative features that have made them effective in filling gaps in the traditional financial system. But developers cannot comply with the requirements. A software developer that contributes lines of code to open-source projects on permissionless networks cannot somehow take control of that code across all of its subsequent uses to supervise any potential application of it to trading activity. Instead, that developer will leave the market or provide services to a traditional trading platform, thereby further entrenching the traditional systems and widening the gaps these innovations have begun to fill. Thus, the regulations could effectively ban many parts of the industry they seek to regulate.

In particular, precluding or restricting the use of decentralized exchange protocols, and mandating centralization, will facilitate and exacerbate, rather than curtail, the threats to investors that the Commission seeks to prevent. Indeed, one expert concluded from a security audit of disintermediated market applications that "decentralized finance's main problem is centralization."[20] By nature, these kinds of protocols gain security through more decentralization, not less. The Proposal will thus create greater risks for investors by centralizing those disintermediated market applications that it does not regulate out of existence. And it will reduce or eliminate market access for many market participants, imposing greater risks on the system generally.

C. The Proposal Would Harm the United States' Competitive Position Without Benefit

Many sectors of the economy are currently decentralizing, and DeFi protocols therefore represent only one example of an evolving trend that the Proposal would arbitrarily and unnecessarily impede.[21] But the Commission cannot impede decentralization in other jurisdictions, which are taking affirmative steps to attract the disintermediated market industry.

El Salvador, for example, has adopted bitcoin as legal tender and seeks to create a tax-free "Bitcoin City" that would attract bitcoin miners.[22] *The Financial* Times observes that,

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[20] Joe Uchill, *Centralization, ironically, most common cause of decentralized finance hacks*, SC Media (Jan. 19, 2022), https://www.scmagazine.com/analysis/application-security/centralization-ironically-most-common-cause-of-decentralized-finance-hacks. *See also*, Sam Bourgi, *'Centralization issues' are the biggest culprits of DeFi attacks: CertiK*, Cointelegraph (Jan. 11, 2022), https://cointelegraph.com/news/centralization-issues-are-the-biggest-culprits-of-defi-attacks-certik.

[21] *See, e.g.*, Tyler Cowen, *The Future Will Be Decentralized*, Bloomberg Opinion (Feb. 7, 2021), https://www.bloombergquint,com/amp/opinion/everything-will-soon-be-on-the-blockchain-whatever-that-means.

[22] *See, e.g.*, Kejal Vyas and Santiago Pérez, *Can Bitcoin Be a National Currency? El Salvador Is Trying to Find Out*, The Wall Street Journal (Feb. 16, 2022), https://www.wsj.com/articles/bitcoin-national-currency-el-salvador-11645026831.

"[w]hile other governments seek to rein in crypto businesses," Switzerland "intends to have a first-mover advantage when it comes to crypto fintech," and has licensed two cryptobanks and introduced codification for unique disintermediated market needs, such as proof of ownership.[23] The United Arab Emirates seeks to attract the disintermediated market industry by "grant[ing] bespoke licenses for blockchain related businesses."[24] By at least one metric, the United States is the current global leader for the adoption of DeFi protocols, though its closest competitors currently include China and the United Kingdom.[25] But the absence of permissions, the lack of need for geographic proximity, and the open-source techniques of DeFi protocol development mean that it is highly mobile and accessible to consumers anywhere in the world with internet access.

If the United States is to reap the benefits of the industry and help determine the ultimate regime that regulates it, the Commission must not adopt regulations that could regulate its development out of existence within the United States' borders. The Proposal may very well drive financial innovation offshore and leave the U.S. markets at a substantial competitive disadvantage. Once driven offshore, however, financial innovations will not cease, and American investors will still desire to access these permissionless protocols via the internet. Rather than imposing a *de facto* ban on development that would foster incentives for American investors to seek out offshore markets, it would be better to create a framework for U.S. investors to trade under appropriate U.S. regulatory oversight.

Moreover, given that the decentralized finance ecosystem is in its early stages and a regulatory framework for digital assets has not yet been developed, the United States has a unique opportunity to take a balanced approach to the DeFi industry that carefully outlines appropriate regulatory parameters while balancing the costs and benefits to investors.[26] Such an approach would not only protect U.S. investors, but would also create incentives for development within the DeFi industry to take place onshore and to nurture domestic growth. Additionally, the United States has an opportunity to capitalize on its position as an early hub for the DeFi industry by influencing other international regimes to follow its regulatory approach.

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23 Sam Jones, *Switzerland's crypto valley looks past cold market winds*, Financial Times (Jan. 6, 2022), https://www.ft.com/content/b827f5c4-1278-4e36-8c5e-e450a325c16f.

24 Issac John, *DeFi set to revolutionise global trade*, Khaleej Times (Dec. 17, 2021), https://www.khaleejtimes.com/business/defi-set-to-revolutionise-global-trade.

25 *See Introducing the Chainalysis Global DeFi Adoption Index*, Chainalysis (Oct. 24, 2021), https://blog.chainalysis.com/reports/2021-global-defi-adoption-index.

26 *See* Executive Order on Ensuring Responsible Development of Digital Assets (Mar. 9, 2022), *supra* note 2, ("The United States has an 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, particularly in setting standards that promote: democratic values; the rule of law; privacy; the protection of consumers, investors, and businesses; and interoperability with digital platforms, legacy architecture, and international payment systems.")

III. The Proposal Exceeds the Commission's Statutory Authority

We respectfully submit that an organization, association, or group that merely "makes available" a CPS, without further involvement in transactional execution and related services that are characteristic of exchanges, does not satisfy the definition of an "exchange" in Section 3(a)(1) of the Exchange Act. The statutory definition of an "exchange" includes a specific requirement that the organization, association, or group be "otherwise performing with respect to securities the functions commonly performed by a stock exchange."[27] Congress's use of the word "otherwise" means that the definition's reference to "bringing together purchases and sellers of securities" must be read in conjunction with whether the relevant organization, association, or groups of persons is bringing together such purchasers and sellers in a manner consistent with the functions commonly performed by a stock exchange.[28] Any other reading would lead to overbroad results, such as covering online discussion forums, industry conferences, and other settings where securities market participants share ideas with each other.

Consistent with this reading, the "exchange" definition has historically and repeatedly been interpreted to encompass system or platform *operators* that necessarily assume responsibility for a variety of execution and related services and maintain an ongoing trading and self-regulatory relationship with their participants.[29] In contrast, the statutory definition does not, and has not been construed to, apply to entities or groups that offer communications and

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27 *See* 15 U.S.C. § 78c(a)(1).

28 *See* Delta Government Options Corp., 55 Fed. Reg. 1,890, 1,894 (Jan. 12, 1990) (finding that the "Delta System" was not an "exchange" because the "fundamental characteristic" of an exchange is "centralized trading and providing purchasers and sellers...buy and sell quotations on a regular or continuous basis so that [they] have a reasonable expectation that they can regularly execute their orders t those price quotations"). In 1998, the Commission also promulgated a regulation that specifically tied "exchange" status to marketplace functions. *See* 17.C.F.R. § 240.3b-16 (providing that an entity or group is an "exchange" if it (1) "brings together the orders for securities of multiple buyers and sellers" and (2) uses established, non-discretionary methods...under which such orders interacts with each other, and the buyers and sellers entering such orders agree to the terms of a trade").

29 *See, e.g., Automated Matching Sys. Exch., LLC* v. *United States Sec. & Exch. Comm'n*, 826 F.3d 1017, 1021–22 (8th Cir. 2016) (finding that "[t]he [Exchange] Act controls what types of entities can operate as a securities exchange" and observing that "[a] registered national securities exchange enforces compliance of its members and associated persons with its internal rules, as well as with federal securities laws and rules and regulations thereunder"; "must maintain procedures to surveil for securities law violations, such as insider trading and manipulation on the exchange and examine its members for compliance with securities laws, Commission rules and regulations, and its own rules"; "must...discipline its members and persons associated with its members when it finds a violation; and "must address a variety of subjects" that "include membership, fair representation in governance, and burdens on competition," among other factors) (internal citations omitted).

software services used in connection with trading activities but that have no ongoing relationship with users and no involvement in transactions.[30]

In the Proposal, the Commission states that "Congress provided a broad definition of the term exchange, permitting the Commission to apply the definition flexibly as the securities markets evolve over time."[31] However, the Proposal does not simply expand the definition of exchange to fill "loopholes" which were created "by slight variations in the method of doing business," as Congress originally contemplated.[32] Rather, the Proposal would radically expand the definition of "exchange" to regulate tools and applications that were previously understood, including by the Commission itself, to fall outside of the Commission's exchange registration framework.[33]

In this regard, the Commission has previously expressed concern about an overly broad definition of an exchange, and has appropriately noted that "a broad interpretation [of exchange] would place 'evolving [alternative] trading systems within the "strait jacket" of exchange regulation, thus stifling innovation.'[34] As further discussed in Section II of this letter, the Proposal stands to threaten or eliminate the development in the U.S. of important innovations within communication and software, potentially including but not limited to DeFi protocols. The Commission has also previously expressed concern that "an expansive definition of the term 'exchange' would force a non-member, for-profit, proprietary trading system into a regulatory scheme for which it is ill-suited." Here, the Proposal could be interpreted as trying to impose the existing regulatory model that requires centralized control onto new financial

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30 *See* Loffa Interactive Corp, Inc., SEC No-Action Letter (Sept. 12, 2003). *See also Board of Trade of City of Chicago* v. *SEC*, 923 F.2d 1270, 1271 (7th Cir. 1991) (finding that the Delta system is not "what is generally understood by the term stock exchange" since it lacks a trading floor and market specialists that enhance the liquidity of the exchange by using their own capital to trade against the market when the trading volume is light). *See also* PerfectData Corporation, SEC No-Action Letter (Aug. 5, 1996) (finding that the systems provider was not required to register as a securities exchange since its services were limited to certain information-providing services and any transactions that were executed occurred independent of its platform).

31 Proposal, at p. 15499.

32 *See* S. Rep. No. 792, 73rd Cong., 2d Sess. (1934).

33 *See* Evare LLC, SEC No-Action Letter (November 30, 1998) (finding that Evare, LLC, an online communication system linking professional money managers that would enable managers to obtain quotes from, and enter orders with broker-dealers, was not required to register as a broker-dealer in accordance with Section 15(b) of the Exchange Act). *See also* Broker-To-Broker Networks, Inc, SEC No-Action Letter (December 1, 2000) (finding that Broker-to-Broker Networks, Inc., an order delivery and messaging system for use by broker-dealers to communicate with each other and their respective settlement agents, did not need to register with the Commission as a broker dealer). *See also* Neptune Networks Ltd., SEC No-Action Letter (March 4, 2020) (finding that Neptune Networks Ltd., a fixed income data connectivity network, did not need to register as a broker-dealer).

34 *See* Securities Exchange Act Release No. 27611 (Jan. 12, 1990), 55 FR 1980, 1900 (Jan. 19, 1990).

infrastructure that relies on the decentralized use of open-source software. In the Commission's own words, the exchange registration regulatory scheme is "ill-suited" for this context.

DeFi protocols, due to their decentralized nature, also do not constitute an organization, association, or group under the Exchange Act. As further discussed in Section I.A of this letter, DeFi protocols run on permissionless blockchain-based ledgers, over which no entity or group has control. In fact, there is no connecting factor linking a DeFi protocol's users other than the protocol's and underlying network's code itself. As such, it is unclear who exactly the "group of persons" statutory requirement would cover as applied in the context of DeFi protocols.

In this regard, courts are reluctant to expand the interpretation of the "group of persons" requirement under the Exchange Act. In *Intercontinental Exchange, Inc.* v. *Securities and Exchange Commission*, the D.C. Circuit recently stated that "the term 'group of persons' remains murky, and vigilance is necessary to ensure the term is not stretched too far."[35] Furthermore, in determining whether a particular service provider constituted a "group of persons" under the Exchange Act, the D.C. Circuit focused in particular on whether the parties were close affiliates of each other and whether such parties were acting in concert.[36] Thus, developers and users of DeFi protocols would not qualify as a "group of persons" because the (a) developers have no ongoing relationship with either market participants or other financial providers and merely make tools available for parties to communicate and (b) users are acting independently of each other.

For these reasons, we think it is unambiguous that the "exchange" definition does not cover DeFi protocols or other parties who merely make available trading protocol technology without subsequent involvement in transactions. But even if the reach of the "exchange" definition was ambiguous, the sheer scope of the Proposal, as described above, would counsel strongly against the Commission's proposed interpretation. As the Supreme Court recently expressed: "We expect Congress to speak clearly when authorizing an agency to exercise powers of vast economic and political significance."[37] That is the kind of power the Commission would be assuming on its own under the Proposal, without Congress having granted it clear authority,, by subjecting such a wide range and large number of technology services and software developers to registration and a *de facto* ban on decentralized deployment of their services and software. It would be surprising indeed that Congress, having revisited the Exchange Act many times since its enactment in 1934, would have seen fit for the Commission to apply its 1934-era authority over traditional stock exchanges this broadly, and in contravention of longstanding Commission precedent of which we should presume Congress has been aware. Rather, for the

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35 *Intercontinental Exchange, Inc.* v. *Securities and Exchange Commission*, 24 F.4th 1013 (D.C. Cir. 2022).

36 *Id.*

37 *Alabama Association of Realtors v. Dept. of HHS,* 141 S.Ct. 2485, 2489 (2021) (per curiam) (citations omitted).

Commission to have such sweeping power, one would expect a clear "textual commitment of authority" considering that, as the Court has also explained, "Congress . . . does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes."[38]

IV. The Commission Has Not Conducted Adequate Economic Analysis as Required by the Exchange Act

Section 23(a)(2) of the Exchange Act requires the Commission to consider "the impact any such rule or regulation would have on competition" and states that the Commission "shall not adopt any such rule or regulation which would impose a burden on competition not necessary or appropriate."[39] Additionally, the Commission must include in any rule or regulation "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 this chapter."[40] Section 3(f) of the Exchange Act requires the Commission to consider whether the action will promote efficiency, competition, and capital formation.[41] The D.C. Circuit has viewed these provisions, together with the requirement under the Administrative Procedure Act ("**APA**") that Commission rulemaking be conducted "in accordance with law," as imposing on the Commission a "statutory obligation to determine as best it can the economic implications of the rule."[42] Similarly, the court has found certain Commission rules arbitrary and capricious because of the Commission's failure to adequately evaluate a proposed rule's economic impact.[43] Additionally, the Division of Risk, Strategy, and Financial Innovation and the Office of the General Counsel have recognized in their guidance that "high-quality economic analysis is an essential part of SEC rulemaking."[44]

The Proposal's cost-benefit analysis falls well short of the Commission's statutory duty and the Commission's own interpretation of its obligations. The Proposal's economic analysis is fundamentally flawed because it both fails to consider the negative consequences that

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38 *Whitman v. American Trucking Ass'ns*, 531 U.S. 457, 468 (2001).

39 *See* 15 U.S.C. 78w(a)(2).

40 *Id.*

41 *See* 15 U.S.C. 78(c)(f).

42 *Chamber of Commerce* v. *SEC*, 412 F.3d 122, 144–45 (D.C. Cir. 2005); *see also* Memorandum on the Current Guidance on Economic Analysis in SEC Rule Making to the Staff of the Rulewriting Divisions and Offices (Mar. 16, 2012).

43 *Chamber of Commerce*, 412 F.3d at 143; *see also Business Roundtable*, 647 F.3d at 1148 (finding that the Commission had failed "adequately to assess the economic effects of a new rule").

44 Memorandum on the Current Guidance on Economic Analysis in SEC Rule Making to the Staff of the Rulewriting Divisions and Offices (Mar. 16, 2012).

would result from the proposed expansion of exchange registration requirements and overestimates the potential benefits of requiring additional entities to register as an exchange or as a broker-dealer. Additionally, it is not possible for the public to provide meaningful cost-benefit feedback because the Commission's proposed expansion of the definition of an "exchange" is so broad that it is impossible to establish a meaningful limit on the platforms and tools that would be covered by the Proposal.

The Proposal significantly underestimates the number of entities that would be required to register, including those that could not, in practice, meet concomitant regulatory obligations designed for financial intermediaries. It thus fails to account for the true costs of the Proposal. The Proposal contemplates that only 139 additional entities would be classified as exchanges. However, as noted above, the proposed expansion of the definition of an exchange is so broad that almost any communication tool used in the securities industry could be argued to constitute a CPS subject to registration. As a result, the Proposal's cost-benefit analysis does not adequately address or consider the full effects of the Proposal.

Moreover, the Proposal focuses almost exclusively on a registrant's regulatory costs of compliance but fails to consider the costs of eliminating an important sector of the financial markets. The Proposal does not account for the fact that the Proposal would preclude the development in the U.S. of many software tools and applications, including, but not limited to, DeFi protocols. In addition, the Proposal fails to account for the resulting indirect costs on end users that will no longer have the same access to DeFi protocols and may have to revert to using traditional trading platforms.

The Proposal does not explain or account for the additional supervisory costs that would be required to oversee the additional entities that would now be classified as exchanges or broker-dealers. The Commission should carefully weigh these costs against the potential benefits of having such entities register as an exchange or as a broker-dealer.

Finally, the Commission itself acknowledges that it does not have the data to inform the Commission on certain economic effects and, as a result, the Commission is unable to quantify certain economic effects of the Proposal.[45] We agree. Given the significance of the Proposal and the potential far-reaching implications on financial markets and end-users, we respectfully submit that the Commission should wait until it has the data necessary to address the issues in a deliberate, comprehensive, and transparent way. The Commission cannot satisfy its rulemaking responsibilities without first giving commenters sufficient information to formulate their views.

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[45] Proposal, at p. 15618.

V. The Proposal Does Not Provide Fair and Sufficient Notice Under the Administrative Procedure Act

The APA requires federal agencies to provide notice and an opportunity to comment on regulatory proposals.[46] To satisfy the rulemaking requirements of Section 553 of the APA, an agency "must provide sufficient factual detail and rationale for the rule to permit interested parties to comment meaningfully." An agency must give "interested persons an opportunity to participate in the rule making" and the "affected party should have anticipated the agency's final course in light of the initial notice."[47] Integral to an agency's notice requirement under the APA "is its duty to identify and make available technical studies and data that it has employed in reaching the decisions to propose particular rules."[48]

The Proposal fails to provide sufficient notice of the proposed scope of the rule and fails to give notice of who would be affected by the Proposal. First, because the Proposal's cost-benefit analysis is insufficient under the Exchange Act, the Proposal does not provide affected parties with the necessary information to formulate their views. Second, the Proposal does not give adequate guidance on the parties that would be affected by the rule because the amendments to the definition of exchange are overly broad and could potentially encapsulate almost any tool that allows parties to communicate a trading interest.

Additionally, agencies must provide affected parties "enough time with enough information to comment and for the agency to consider and respond to the comments."[49] The courts and Congress agree that public comment periods must be commensurate with the length, complexity, and significance of rulemakings. Here, the Commission has provided a 30-day comment period to respond to a 591-page proposal that, if adopted, would radically transform the regulation of financial markets and their support structure. Given the ambiguous and unclear application of the Proposal, as noted above, and its extraordinary breadth, a 30-day comment period is simply too short for most affected parties to undertake the kind of analysis that is required to meaningfully respond. Further, since the Commission has issued a large number of complicated proposals over the past several months, which in many cases impact the same categories of market participants, the 30-day comment period is clearly insufficient time for

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46 5 U.S.C. § 553(b).

47 *Covad Communications* v. *FCC*, 450 F.3d 528, 548 (D.C. Cir. 2006).

48 *Kern Cty. Farm Bureau* v. *Allen*, 450 F 3d 1072, 1076 (9th Cir. 2006) (internal citation omitted).

49 *Prometheus Radio Project* v. *F.C.C.*, 652 F.3d 431, 450 (3d Cir. 2011); *see also, e.g., Florida Power & Light Co.* v. *U.S.*, 846 F.2d 765, 771 (D.C. Cir. 1988) (affirming that the APA's notice provisions require agencies "not only [to] give adequate time for comments, but also must provide sufficient factual detail and rationale for the rule to permit interested parties to comment meaningfully").

commentators to interpret and digest the effects of this Proposal not only on existing rules, but also on other rules that have recently been proposed.[50]

Moreover, the revised definition of an exchange in the Proposal is so ambiguous and vague that it deprives market participants of fair notice about what the Proposal requires. The void-for-vagueness doctrine dictates that unduly uncertain laws, whether criminal or civil, violate due process and cannot be enforced.[51] As Justice Gorsuch recently explained, when people are "[left] in the dark about what the law demands," it "invites the exercise of arbitrary power" by "allowing prosecutors and courts" to simply "make [the law] up."[52] The void-for-vagueness doctrine has particular salience when applied to government action that affects First Amendment rights, as this Proposal does, an aspect discussed further in Section VI.[53] As noted above, the Proposal's revised definition of exchange may unintentionally encompass certain entities that the Commission may not have intended to regulate, including DeFi protocols. The revised definition of exchange has no real limiting factor that would enable market participants to predict which communication system or online platform will be covered by the Proposal and the Commission does not provide any guidance to assist participants in determining who will be covered by the new rule. Additionally, market participants can no longer rely on numerous Commission no-action letters that repeatedly held that such support entities are not subject to exchange registration or broker-dealer requirements, despite the fact that the Commission does not reference these letters or provide guidance on their continued applicability.[54] As a result, the Proposal fails to provide fair notice to market participants as to whom the Proposal will affect.

VI. The Proposal Raises First Amendment Concerns

By expanding the definition of "exchange" to encompass even those software applications that simply facilitate communication, the Commission will impose unconstitutional limits that are prohibited under the First Amendment to the Constitution. Though courts have not developed a single, unified approach to the status of software code under the First Amendment, they have been inclined to view code as protected when it is intended to be

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50 *See* Release No.34-94524; File No. S7-12-22. *See also* Commissioner Hester M. Peirce's Statement on the Proposal to Further Define "As a Part of a Regular Business" in the Definition of Dealer and Government Securities Dealer (Mar. 28, 2022) (noting that the Commission has issued a large number of extremely complicated rules over the past several months).

51 *See Sessions* v. *Dimaya*, 138 S. Ct. 1204, 1209 (2018).

52 *Id.* at 1223-24 (Gorsuch, J., concurring in judgment).

53 *See, e.g., Grayned* v. *City of Rockford*, 408 U.S. 104, 109 (1972) ("[W]here a vague statute abuts upon sensitive areas of basic First Amendment freedoms, it operates to inhibit the exercise of those freedoms. Uncertain meanings inevitably lead citizens to steer far wider of the unlawful zone . . . than if the boundaries of the forbidden areas were clearly marked.") (internal citations omitted).

54 *See* Evare LLC, Broker-to-Broker Networks, Inc., Neptune Networks Ltd., *supra* note 33.

interpreted by a person, instead of a computer, especially if that code is expressing an idea and facilitates user interaction. For example, the U.S. Court of Appeals for the Sixth Circuit concluded in *Junger* v. *Daley* that the code at issue was protected because it was an "expressive means for the exchange of information and ideas."[55] The expression of even technical information warrants First Amendment protection,[56] and the U.S. District Court for the District of Columbia has held that instructive, communicative code appended to purely functional code warrants First Amendment scrutiny for the entire communication at issue.[57]

The Proposal would impose significant burdens on various categories of code that courts have viewed as more deserving of First Amendment protection. The regulations target technology that "makes available established, non-discretionary methods ... *under which buyers and sellers can interact and agree* to the terms of a trade." This kind of technology provides "expressive means for the exchange of information and ideas" concerning markets and facilitates dynamic user engagement.[58] Moreover, a DeFi protocol's community governance structure requires public interaction with the protocol's core open-source code in order to decide how to update and evolve it. That public involvement, in turn, means that such code is more likely to merit First Amendment protection.

The Commission should, in interpreting the scope of its registration categories, seek to avoid potential First Amendment issues. For example, in *Lowe* v. *S.E.C.*,[59] the Supreme Court adopted a broad construction of a statutory exception from registration under the Investment Advisers Act for publishers, in order to avoid such issues. Although the *Lowe* decision was interpreting a different statute administered by the Commission, its reasoning is equally applicable to the Exchange Act and the Commission's action under the Proposal. Therefore, the Commission must exercise greater caution to avoid the First Amendment problems that would stem from inappropriate expansion of the registration requirements for exchanges and ATSs.

Recognizing that the types of code at issue here enjoy First Amendment protections, courts have previously applied intermediate scrutiny to evaluate regulations of or restrictions on the code.[60] To survive intermediate scrutiny, a regulation must advance a substantial governmental interest that is unrelated to the suppression of free expression and

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55 209 F.3d 481, 485 (6th Cir. 2000).

56 *Id.* at 447.

57 *Karn* v. *U.S. Dep't of State*, 925 F. Supp. 1, 9 (D.D.C. 1996).

58 *Corley,* 273 F.3d at 449.

59 472 U.S. 181 (1985).

60 *Id.* at 442. *Accord 321 Studios* v. *Metro Goldwyn Mayer Studios, Inc.*, 307 F. Supp. 2d 1085, 1100 (N.D. Cal. 2004); *Green* v. *U.S. Dep't of Just.*, 392 F. Supp. 3d 68, 91 (D.D.C. 2019).

must not burden substantially more speech than is necessary to further that interest.[61] We respectfully submit that the Proposal's extraordinary breadth, burdening expression far beyond the execution of a trade, indicates that the Proposal burdens substantially more speech than is necessary, especially when considering the alternative approaches discussed in Section VIII of this letter. We accordingly suggest that the Commission adopt these alternative approaches and revise its Proposal to construe more narrowly the definition of exchange to avoid any constitutional complications.

VII. Recommended Alternative Approaches

The Commission has articulated a number of laudable goals in this Proposal. These proposed amendments admirably aim to protect confidential trading information from being employed for unapproved and unrelated uses by platform operators and other users or customers; to create operational transparency through disclosures on Form ATS-N; to ensure fair access to key financial entities and technology; and to ensure that the benefits of SEC and FINRA oversight apply not only to the traditional financial system but also to new market situations as well.

Given the integral and growing role that DeFi protocols play in the real economy, the Commission's efforts to accomplish these goals must be tailored to avoid imposing undue costs on DeFi protocols and other software tools, restricting the operation of markets, or unduly curtailing financial innovation that benefits investors. As noted above, the Commission's proposed approach would result in significant costs to service providers that could result in a number of market participants exiting the market or significantly curtailing their innovative operations. That in turn would curtail the benefits of innovation such as increased liquidity, efficiency, transparency, accessibility, and composability, among many others. To avoid those consequences, the Commission should consider more appropriately tailored ways of achieving its goals without placing undue burdens on market participants.

We respectfully submit that the proposed amendments fail to adopt such an approach. The Proposal applies a one-size-fits-all approach to protocols that operate in categorically different ways from the traditional financial service providers to which the approach is tailored. Instead, we suggest that the Commission distinguish DeFi protocols from the traditional financial intermediaries based on their unique functionality and the extent to which these protocols, by their very nature, already protect investors, the market, and the public, and the unique risks they may present. The Commission's approach would benefit from incorporating workable practices that DeFi protocols have already begun to reflect. A non-exhaustive list of alternative approaches and requirements might include:

- Equal access to, and protection of, order and transaction information;

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61 *See Green*, 394 F. Supp. 3d at 94.

- Full public disclosure of the operational mechanics, including the code, governing interaction of trading interest and executions;

- Regulation of development and launch mechanics, such as standards for code review, audits, and testing, as well as support for "guarded" launches;

- Disclosure of token economics, earnings, and fees; equity financings, prior token sales, and related commitments; and governance rights and processes;

- Objective standards for access to protocols, such as through publicly available code; and

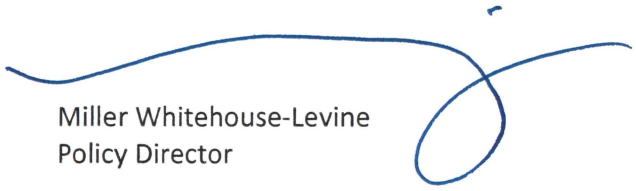
- Deployment of the protocol on a permissionless blockchain network, with consensus rules that cannot be modified by a single person, entity, or coordinated group of persons.

More generally, an "activity-based," as opposed to "entity-based," regulatory framework would better govern the hyper-specialized and decentralized nature of DeFi protocols. Regulation pursuant to an activity-based framework would better govern an industry where the makeup and characteristics of the participants are undergoing rapid transformation.

* * *

We appreciate the opportunity to provide our comments to the Commission regarding the proposed amendments to Rule 3b-16, and we would be pleased to meet with the Commission or its staff to discuss our comments. If the staff has questions or comments, please do not hesitate to contact the undersigned, or David J. Gilberg (212-558-4680), James M. McDonald (212-558-3030), or Colin D. Lloyd (212-558-3040) of Sullivan & Cromwell LLP, outside counsel to DEF.

Respectfully submitted,



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