SECURITIES AND EXCHANGE COMMISSION

SECURITIES EXCHANGE ACT OF 1934

Release No. 81207 / July 25, 2017

Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO

I. Introduction and Summary

The United States Securities and Exchange Commission's ("Commission") Division of Enforcement ("Division") has investigated whether The DAO, an unincorporated organization; Slock.it UG ("Slock.it"), a German corporation; Slock.it's co-founders; and intermediaries may have violated the federal securities laws. The Commission has determined not to pursue an enforcement action in this matter based on the conduct and activities known to the Commission at this time.

As described more fully below, The DAO is one example of a Decentralized Autonomous Organization, which is a term used to describe a "virtual" organization embodied in computer code and executed on a distributed ledger or blockchain. The DAO was created by Slock.it and Slock.it's co-founders, with the objective of operating as a for-profit entity that would create and hold a corpus of assets through the sale of DAO Tokens to investors, which assets would then be used to fund "projects." The holders of DAO Tokens stood to share in the anticipated earnings from these projects as a return on their investment in DAO Tokens. In addition, DAO Token holders could monetize their investments in DAO Tokens by re-selling DAO Tokens on a number of web-based platforms ("Platforms") that supported secondary trading in the DAO Tokens.

After DAO Tokens were sold, but before The DAO was able to commence funding projects, an attacker used a flaw in The DAO's code to steal approximately one-third of The DAO's assets. Slock.it's co-founders and others responded by creating a work-around whereby DAO Token holders could opt to have their investment returned to them, as described in more detail below.

The investigation raised questions regarding the application of the U.S. federal securities laws to the offer and sale of DAO Tokens, including the threshold question whether DAO Tokens are securities. Based on the investigation, and under the facts presented, the Commission has determined that DAO Tokens are securities under the Securities Act of 1933 ("Securities Act") and the Securities Exchange Act of 1934 ("Exchange Act").[1] The Commission deems it appropriate and in the public interest to issue this report of investigation ("Report") pursuant to

[1] This Report does not analyze the question whether The DAO was an "investment company," as defined under Section 3(a) of the Investment Company Act of 1940 ("Investment Company Act"), in part, because The DAO never commenced its business operations funding projects. Those who would use virtual organizations should consider their obligations under the Investment Company Act.

Section 21(a) of the Exchange Act[2] to advise those who would use a Decentralized Autonomous Organization ("DAO Entity"), or other distributed ledger or blockchain-enabled means for capital raising, to take appropriate steps to ensure compliance with the U.S. federal securities laws. All securities offered and sold in the United States must be registered with the Commission or must qualify for an exemption from the registration requirements. In addition, any entity or person engaging in the activities of an exchange must register as a national securities exchange or operate pursuant to an exemption from such registration.

This Report reiterates these fundamental principles of the U.S. federal securities laws and describes their applicability to a new paradigm—virtual organizations or capital raising entities that use distributed ledger or blockchain technology to facilitate capital raising and/or investment and the related offer and sale of securities. The automation of certain functions through this technology, "smart contracts,"[3] or computer code, does not remove conduct from the purview of the U.S. federal securities laws.[4] This Report also serves to stress the obligation to comply with the registration provisions of the federal securities laws with respect to products and platforms involving emerging technologies and new investor interfaces.

II. Facts

A. Background

From April 30, 2016 through May 28, 2016, The DAO offered and sold approximately 1.15 billion DAO Tokens in exchange for a total of approximately 12 million Ether ("ETH"), a

[2] Section 21(a) of the Exchange Act authorizes the Commission to investigate violations of the federal securities laws and, in its discretion, to "publish information concerning any such violations." This Report does not constitute an adjudication of any fact or issue addressed herein, nor does it make any findings of violations by any individual or entity. The facts discussed in Section II, *infra*, are matters of public record or based on documentary records. We are publishing this Report on the Commission's website to ensure that all market participants have concurrent and equal access to the information contained herein.

[3] Computer scientist Nick Szabo described a "smart contract" as:

> a computerized transaction protocol that executes terms of a contract. The general objectives of smart contract design are to satisfy common contractual conditions (such as payment terms, liens, confidentiality, and even enforcement), minimize exceptions both malicious and accidental, and minimize the need for trusted intermediaries. Related economic goals include lowering fraud loss, arbitrations and enforcement costs, and other transaction costs.

See Nick Szabo, *Smart Contracts*, 1994, http://www.virtualschool.edu/mon/Economics/SmartContracts.html.

[4] *See SEC v. C.M. Joiner Leasing Corp.*, 320 U.S. 344, 351 (1943) ("[T]he reach of the [Securities] Act does not stop with the obvious and commonplace. Novel, uncommon, or irregular devices, whatever they appear to be, are also reached if it be proved as matter of fact that they were widely offered or dealt in under terms or courses of dealing which established their character in commerce as 'investment contracts,' or as 'any interest or instrument commonly known as a 'security'."); *see also Reves v. Ernst & Young*, 494 U.S. 56, 61 (1990) ("Congress' purpose in enacting the securities laws was to regulate investments, in whatever form they are made and by whatever name they are called.").

virtual currency[5] used on the Ethereum Blockchain.[6] As of the time the offering closed, the total ETH raised by The DAO was valued in U.S. Dollars ("USD") at approximately $150 million.

The concept of a DAO Entity is memorialized in a document (the "White Paper"), authored by Christoph Jentzsch, the Chief Technology Officer of Slock.it, a "Blockchain and IoT [(internet-of-things)] solution company," incorporated in Germany and co-founded by Christoph Jentzsch, Simon Jentzsch (Christoph Jentzsch's brother), and Stephan Tual ("Tual").[7] The White Paper purports to describe "the first implementation of a [DAO Entity] code to automate organizational governance and decision making."[8] The White Paper posits that a DAO Entity "can be used by individuals working together collaboratively outside of a traditional corporate form. It can also be used by a registered corporate entity to automate formal governance rules contained in corporate bylaws or imposed by law." The White Paper proposes an entity—a DAO Entity—that would use smart contracts to attempt to solve governance issues it described as inherent in traditional corporations.[9] As described, a DAO Entity purportedly would supplant traditional mechanisms of corporate governance and management with a blockchain such that contractual terms are "formalized, automated and enforced using software."[10]

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[5] The Financial Action Task Force defines "virtual currency" as:

> a digital representation of value that can be digitally traded and functions as: (1) a medium of exchange; and/or (2) a unit of account; and/or (3) a store of value, but does not have legal tender status (i.e., when tendered to a creditor, is a valid and legal offer of payment) in any jurisdiction. It is not issued or guaranteed by any jurisdiction, and fulfils the above functions only by agreement within the community of users of the virtual currency. Virtual currency is distinguished from fiat currency (a.k.a. "real currency," "real money," or "national currency"), which is the coin and paper money of a country that is designated as its legal tender; circulates; and is customarily used and accepted as a medium of exchange in the issuing country. It is distinct from e-money, which is a digital representation of fiat currency used to electronically transfer value denominated in fiat currency.

FATF Report, Virtual Currencies, Key Definitions and Potential AML/CFT Risks, FINANCIAL ACTION TASK FORCE (June 2014), http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf.

[6] Ethereum, developed by the Ethereum Foundation, a Swiss nonprofit organization, is a decentralized platform that runs smart contracts on a blockchain known as the Ethereum Blockchain.

[7] Christoph Jentzsch released the final draft of the White Paper on or around March 23, 2016. He introduced his concept of a DAO Entity as early as November 2015 at an Ethereum Developer Conference in London, as a medium to raise funds for Slock.it, a German start-up he co-founded in September 2015. Slock.it purports to create technology that embeds smart contracts that run on the Ethereum Blockchain into real-world devices and, as a result, for example, permits anyone to rent, sell or share physical objects in a decentralized way. *See* SLOCK.IT, https://slock.it/.

[8] Christoph Jentzsch, *Decentralized Autonomous Organization to Automate Governance Final Draft – Under Review*, https://download.slock.it/public/DAO/WhitePaper.pdf.

[9] *Id.*

[10] *Id.* The White Paper contained the following statement:

> A word of caution, at the outset: the legal status of [DAO Entities] remains the subject of active and vigorous debate and discussion. Not everyone shares the same definition. Some have said that [DAO Entities] are autonomous code and can operate independently of legal systems; others

B. The DAO

"The DAO" is the "first generation" implementation of the White Paper concept of a DAO Entity, and it began as an effort to create a "crowdfunding contract" to raise "funds to grow [a] company in the crypto space."[11] In November 2015, at an Ethereum Developer Conference in London, Christoph Jentzsch described his proposal for The DAO as a "for-profit DAO [Entity]," where participants would send ETH (a virtual currency) to The DAO to purchase DAO Tokens, which would permit the participant to vote and entitle the participant to "rewards."[12] Christoph Jentzsch likened this to "buying shares in a company and getting … dividends."[13] The DAO was to be "decentralized" in that it would allow for voting by investors holding DAO Tokens.[14] All funds raised were to be held at an Ethereum Blockchain "address" associated with The DAO and DAO Token holders were to vote on contract proposals, including proposals to The DAO to fund projects and distribute The DAO's anticipated earnings from the projects it funded.[15] The DAO was intended to be "autonomous" in that project proposals were in the form of smart contracts that exist on the Ethereum Blockchain and the votes were administered by the code of The DAO.[16]

> have said that [DAO Entities] must be owned or operate[d] by humans or human created entities. There will be many use cases, and the DAO [Entity] code will develop over time. Ultimately, how a DAO [Entity] functions and its legal status will depend on many factors, including how DAO [Entity] code is used, where it is used, and who uses it. This paper does not speculate about the legal status of [DAO Entities] worldwide. This paper is not intended to offer legal advice or conclusions. Anyone who uses DAO [Entity] code will do so at their own risk.

Id.

[11] Christoph Jentzsch, *The History of the DAO and Lessons Learned*, SLOCK.IT BLOG (Aug. 24, 2016), https://blog.slock.it/the-history-of-the-dao-and-lessons-learned-d06740f8cfa5#.5o62zo8uv. Although The DAO has been described as a "crowdfunding contract," The DAO would not have met the requirements of Regulation Crowdfunding, adopted under Title III of the Jumpstart Our Business Startups (JOBS) Act of 2012 (providing an exemption from registration for certain crowdfunding), because, among other things, it was not a broker-dealer or a funding portal registered with the SEC and the Financial Industry Regulatory Authority ("FINRA"). *See Regulation Crowdfunding: A Small Entity Compliance Guide for Issuers*, SEC (Apr. 5, 2017), https://www.sec.gov/info/smallbus/secg/rccomplianceguide-051316.htm; *Updated Investor Bulletin: Crowdfunding for Investors*, SEC (May 10, 2017), https://www.sec.gov/oiea/investor-alerts-bulletins/ib_crowdfunding-.html.

[12] *See* Slockit, *Slock.it DAO demo at Devcon1: IoT + Blockchain*, YOUTUBE (Nov. 13, 2015), https://www.youtube.com/watch?v=49wHQoJxYPo.

[13] *Id.*

[14] *See* Jentzsch, *supra* note 8.

[15] *Id.* In theory, there was no limitation on the type of project that could be proposed. For example, proposed "projects" could include, among other things, projects that would culminate in the creation of products or services that DAO Token holders could use or charge others for using.

[16] *Id.*

On or about April 29, 2016, Slock.it deployed The DAO code on the Ethereum Blockchain, as a set of pre-programmed instructions.[17] This code was to govern how The DAO was to operate.

To promote The DAO, Slock.it's co-founders launched a website ("The DAO Website"). The DAO Website included a description of The DAO's intended purpose: "To blaze a new path in business for the betterment of its members, existing simultaneously nowhere and everywhere and operating solely with the steadfast iron will of unstoppable code."[18] The DAO Website also described how The DAO operated, and included a link through which DAO Tokens could be purchased. The DAO Website also included a link to the White Paper, which provided detailed information about a DAO Entity's structure and its source code and, together with The DAO Website, served as the primary source of promotional materials for The DAO. On The DAO Website and elsewhere, Slock.it represented that The DAO's source code had been reviewed by "one of the world's leading security audit companies" and "no stone was left unturned during those five whole days of security analysis."[19]

Slock.it's co-founders also promoted The DAO by soliciting media attention and by posting almost daily updates on The DAO's status on The DAO and Slock.it websites and numerous online forums relating to blockchain technology. Slock.it's co-founders used these posts to communicate to the public information about how to participate in The DAO, including: how to create and acquire DAO Tokens; the framework for submitting proposals for projects; and how to vote on proposals. Slock.it also created an online forum on The DAO Website, as well as administered "The DAO Slack" channel, an online messaging platform in which over 5,000 invited "team members" could discuss and exchange ideas about The DAO in real time.

1. DAO Tokens

In exchange for ETH, The DAO created DAO Tokens (proportional to the amount of ETH paid) that were then assigned to the Ethereum Blockchain address of the person or entity remitting the ETH. A DAO Token granted the DAO Token holder certain voting and ownership rights. According to promotional materials, The DAO would earn profits by funding projects

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[17] According to the White Paper, a DAO Entity is "activated by deployment on the Ethereum [B]lockchain. Once deployed, a [DAO Entity's] code requires 'ether' [ETH] to engage in transactions on Ethereum. Ether is the digital fuel that powers the Ethereum Network." The only way to update or alter The DAO's code is to submit a new proposal for voting and achieve a majority consensus on that proposal. *See* Jentzsch, *supra* note 8. According to Slock.it's website, Slock.it gave The DAO code to the Ethereum community, noting that:

> The DAO framework is [a] side project of Slock.it UG and a gift to the Ethereum community. It consisted of a definitive whitepaper, smart contract code audited by one of the best security companies in the world and soon, a complete frontend interface. All free and open source for anyone to re-use, it is our way to say 'thank you' to the community.

SLOCK.IT, https://slock.it. The DAO code is publicly-available on GitHub, a host of source code. *See The Standard DAO Framework, Inc., Whitepaper*, GITHUB, https://github.com/slockit/DAO.

[18] The DAO Website was available at https://daohub.org.

[19] Stephen Tual, *Deja Vu DAO Smart Contracts Audit Results*, SLOCK.IT BLOG (Apr. 5, 2016), https://blog.slock.it/deja-vu-dai-smart-contracts-audit-results-d26bc088e32e.

that would provide DAO Token holders a return on investment. The various promotional materials disseminated by Slock.it's co-founders touted that DAO Token holders would receive "rewards," which the White Paper defined as, "any [ETH] received by a DAO [Entity] generated from projects the DAO [Entity] funded." DAO Token holders would then vote to either use the rewards to fund new projects or to distribute the ETH to DAO Token holders.

From April 30, 2016 through May 28, 2016 (the "Offering Period"), The DAO offered and sold DAO Tokens. Investments in The DAO were made "pseudonymously" (i.e., an individual's or entity's pseudonym was their Ethereum Blockchain address). To purchase a DAO Token offered for sale by The DAO, an individual or entity sent ETH from their Ethereum Blockchain address to an Ethereum Blockchain address associated with The DAO. All of the ETH raised in the offering as well as any future profits earned by The DAO were to be pooled and held in The DAO's Ethereum Blockchain address. The token price fluctuated in a range of approximately 1 to 1.5 ETH per 100 DAO Tokens, depending on when the tokens were purchased during the Offering Period. Anyone was eligible to purchase DAO Tokens (as long as they paid ETH). There were no limitations placed on the number of DAO Tokens offered for sale, the number of purchasers of DAO Tokens, or the level of sophistication of such purchasers.

DAO Token holders were not restricted from re-selling DAO Tokens acquired in the offering, and DAO Token holders could sell their DAO Tokens in a variety of ways in the secondary market and thereby monetize their investment as discussed below. Prior to the Offering Period, Slock.it solicited at least one U.S. web-based platform to trade DAO Tokens on its system and, at the time of the offering, The DAO Website and other promotional materials disseminated by Slock.it included representations that DAO Tokens would be available for secondary market trading after the Offering Period via several platforms. During the Offering Period and afterwards, the Platforms posted notices on their own websites and on social media that each planned to support secondary market trading of DAO Tokens.[20]

In addition to secondary market trading on the Platforms, after the Offering Period, DAO Tokens were to be freely transferable on the Ethereum Blockchain. DAO Token holders would also be permitted to redeem their DAO Tokens for ETH through a complicated, multi-week (approximately 46-day) process referred to as a DAO Entity "split."[21]

2. Participants in The DAO

According to the White Paper, in order for a project to be considered for funding with "a DAO [Entity]'s [ETH]," a "Contractor" first must submit a proposal to the DAO Entity. Specifically, DAO Token holders expected Contractors to submit proposals for projects that could provide DAO Token holders returns on their investments. Submitting a proposal to The DAO involved: (1) writing a smart contract, and then deploying and publishing it on the

[20] The Platforms are registered with FinCEN as "Money Services Businesses" and provide systems whereby customers may exchange virtual currencies for other virtual currencies or fiat currencies.

[21] According to the White Paper, the primary purpose of a split is to protect minority shareholders and prevent what is commonly referred to as a "51% Attack," whereby an attacker holding 51% of a DAO Entity's Tokens could create a proposal to send all of the DAO Entity's funds to himself or herself.

Ethereum Blockchain; and (2) posting details about the proposal on The DAO Website, including the Ethereum Blockchain address of the deployed contract and a link to its source code. Proposals could be viewed on The DAO Website as well as other publicly-accessible websites. Per the White Paper, there were two prerequisites for submitting a proposal. An individual or entity must: (1) own at least one DAO Token; and (2) pay a deposit in the form of ETH that would be forfeited to the DAO Entity if the proposal was put up for a vote and failed to achieve a quorum of DAO Token holders. It was publicized that Slock.it would be the first to submit a proposal for funding.[22]

ETH raised by The DAO was to be distributed to a Contractor to fund a proposal only on a majority vote of DAO Token holders.[23] DAO Token holders were to cast votes, which would be weighted by the number of tokens they controlled, for or against the funding of a specific proposal. The voting process, however, was publicly criticized in that it could incentivize distorted voting behavior and, as a result, would not accurately reflect the consensus of the majority of DAO Token holders. Specifically, as noted in a May 27, 2016 blog post by a group of computer security researchers, The DAO's structure included a "strong positive bias to vote YES on proposals and to suppress NO votes as a side effect of the way in which it restricts users' range of options following the casting of a vote."[24]

Before any proposal was put to a vote by DAO Token holders, it was required to be reviewed by one or more of The DAO's "Curators." At the time of the formation of The DAO, the Curators were a group of individuals chosen by Slock.it.[25] According to the White Paper, the Curators of a DAO Entity had "considerable power." The Curators performed crucial security functions and maintained ultimate control over which proposals could be submitted to, voted on, and funded by The DAO. As stated on The DAO Website during the Offering Period, The DAO relied on its Curators for "failsafe protection" and for protecting The DAO from "malicous [sic] actors." Specifically, per The DAO Website, a Curator was responsible for: (1) confirming that any proposal for funding originated from an identifiable person or organization; and (2)

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[22] It was stated on The DAO Website and elsewhere that Slock.it anticipated that it would be the first to submit a proposal for funding. In fact, a draft of Slock.it's proposal for funding for an "Ethereum Computer and Universal Sharing Network" was publicly-available online during the Offering Period.

[23] DAO Token holders could vote on proposals, either by direct interaction with the Ethereum Blockchain or by using an application that interfaces with the Ethereum Blockchain. It was generally acknowledged that DAO Token holders needed some technical knowledge in order to submit a vote, and The DAO Website included a link to a step-by-step tutorial describing how to vote on proposals.

[24] By voting on a proposal, DAO Token holders would "tie up" their tokens until the end of the voting cycle. *See* Jentzsch, *supra* note 8 at 8 ("The tokens used to vote will be blocked, meaning they can not [sic] be transferred until the proposal is closed."). If, however, a DAO Token holder abstained from voting, the DAO Token holder could avoid these restrictions; any DAO Tokens not submitted for a vote could be withdrawn or transferred at any time. As a result, DAO Token holders were incentivized either to vote yes or to abstain from voting. *See* Dino Mark et al., *A Call for a Temporary Moratorium on The DAO*, HACKING, DISTRIBUTED (May 27, 2016, 1:35 PM), http://hackingdistributed.com/2016/05/27/dao-call-for-moratorium/.

[25] At the time of The DAO's launch, The DAO Website identified eleven "high profile" individuals as holders of The DAO's Curator "Multisig" (or "private key"). These individuals all appear to live outside of the United States. Many of them were associated with the Ethereum Foundation, and The DAO Website touted the qualifications and trustworthiness of these individuals.

confirming that smart contracts associated with any such proposal properly reflected the code the Contractor claims to have deployed on the Ethereum Blockchain. If a Curator determined that the proposal met these criteria, the Curator could add the proposal to the "whitelist," which was a list of Ethereum Blockchain addresses that could receive ETH from The DAO if the majority of DAO Token holders voted for the proposal.

Curators of The DAO had ultimate discretion as to whether or not to submit a proposal for voting by DAO Token holders. Curators also determined the order and frequency of proposals, and could impose subjective criteria for whether the proposal should be whitelisted. One member of the group chosen by Slock.it to serve collectively as the Curator stated publicly that the Curator had "complete control over the whitelist … the order in which things get whitelisted, the duration for which [proposals] get whitelisted, when things get unwhitelisted … [and] clear ability to control the order and frequency of proposals," noting that "curators have tremendous power."[26] Another Curator publicly announced his subjective criteria for determining whether to whitelist a proposal, which included his personal ethics.[27] Per the White Paper, a Curator also had the power to reduce the voting quorum requirement by 50% every other week. Absent action by a Curator, the quorum could be reduced by 50% only if no proposal had reached the required quorum for 52 weeks.

3. Secondary Market Trading on the Platforms

During the period from May 28, 2016 through early September 2016, the Platforms became the preferred vehicle for DAO Token holders to buy and sell DAO Tokens in the secondary market using virtual or fiat currencies. Specifically, the Platforms used electronic systems that allowed their respective customers to post orders for DAO Tokens on an anonymous basis. For example, customers of each Platform could buy or sell DAO Tokens by entering a market order on the Platform's system, which would then match with orders from other customers residing on the system. Each Platform's system would automatically execute these orders based on pre-programmed order interaction protocols established by the Platform.

None of the Platforms received orders for DAO Tokens from non-Platform customers or routed its respective customers' orders to any other trading destinations. The Platforms publicly displayed all their quotes, trades, and daily trading volume in DAO Tokens on their respective websites. During the period from May 28, 2016 through September 6, 2016, one such Platform executed more than 557,378 buy and sell transactions in DAO Tokens by more than 15,000 of its U.S. and foreign customers. During the period from May 28, 2016 through August 1, 2016, another such Platform executed more than 22,207 buy and sell transactions in DAO Tokens by more than 700 of its U.S. customers.

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[26] Epicenter, *EB134 – Emin Gün Sirer And Vlad Zamfir: On A Rocky DAO*, YOUTUBE (June 6, 2016), https://www.youtube.com/watch?v=ON5GhIQdFU8.

[27] Andrew Quentson, *Are the DAO Curators Masters or Janitors?*, THE COIN TELEGRAPH (June 12, 2016), https://cointelegraph.com/news/are-the-dao-curators-masters-or-janitors.

4. Security Concerns, The "Attack" on The DAO, and The Hard Fork

In late May 2016, just prior to the expiration of the Offering Period, concerns about the safety and security of The DAO's funds began to surface due to vulnerabilities in The DAO's code. On May 26, 2016, in response to these concerns, Slock.it submitted a "DAO Security Proposal" that called for the development of certain updates to The DAO's code and the appointment of a security expert.[28] Further, on June 3, 2016, Christoph Jentzsch, on behalf of Slock.it, proposed a moratorium on all proposals until alterations to The DAO's code to fix vulnerabilities in The DAO's code had been implemented.[29]

On June 17, 2016, an unknown individual or group (the "Attacker") began rapidly diverting ETH from The DAO, causing approximately 3.6 million ETH—1/3 of the total ETH raised by The DAO offering—to move from The DAO's Ethereum Blockchain address to an Ethereum Blockchain address controlled by the Attacker (the "Attack").[30] Although the diverted ETH was then held in an address controlled by the Attacker, the Attacker was prevented by The DAO's code from moving the ETH from that address for 27 days.[31]

In order to secure the diverted ETH and return it to DAO Token holders, Slock.it's co-founders and others endorsed a "Hard Fork" to the Ethereum Blockchain. The "Hard Fork," called for a change in the Ethereum protocol on a going forward basis that would restore the DAO Token holders' investments as if the Attack had not occurred. On July 20, 2016, after a majority of the Ethereum network adopted the necessary software updates, the new, forked Ethereum Blockchain became active.[32] The Hard Fork had the effect of transferring all of the funds raised (including those held by the Attacker) from The DAO to a recovery address, where DAO Token holders could exchange their DAO Tokens for ETH.[33] All DAO Token holders

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[28] *See* Stephan Tual, *Proposal #1-DAO Security, Redux*, SLOCK.IT BLOG (May 26, 2016), https://blog.slock.it/both-our-proposals-are-now-out-voting-starts-saturday-morning-ba322d6d3aea. The unnamed security expert would "act as the first point of contact for security disclosures, and continually monitor, pre-empt and avert any potential attack vectors The DAO may face, including social, technical and economic attacks." *Id.* Slock.it initially proposed a much broader security proposal that included the formation of a "DAO Security" group, the establishment of a "Bug Bounty Program," and routine external audits of The DAO's code. However, the cost of the proposal (125,000 ETH), which would be paid from The DAO's funds, was immediately criticized as too high and Slock.it decided instead to submit the revised proposal described above. *See* Stephan Tual, *DAO.Security, a Proposal to guarantee the integrity of The DAO*, SLOCK.IT BLOG (May 25, 2016), https://blog.slock.it/dao-security-a-proposal-to-guarantee-the-integrity-of-the-dao-3473899ace9d.

[29] *See TheDAO Proposal_ID 5*, ETHERSCAN, https://etherscan.io/token/thedao-proposal/5.

[30] *See* Stephan Tual, *DAO Security Advisory: live updates*, SLOCK.IT BLOG (June 17, 2016), https://blog.slock.it/dao-security-advisory-live-updates-2a0a42a2d07b.

[31] *Id.*

[32] A minority group, however, elected not to adopt the new Ethereum Blockchain created by the Hard Fork because to do so would run counter to the concept that a blockchain is immutable. Instead they continued to use the former version of the blockchain, which is now known as "Ethereum Classic."

[33] *See* Christoph Jentzsch, *What the 'Fork' Really Means*, SLOCK.IT BLOG (July 18, 2016), https://blog.slock.it/what-the-fork-really-means-6fe573ac31dd.

who adopted the Hard Fork could exchange their DAO Tokens for ETH, and avoid any loss of the ETH they had invested.[34]

III. Discussion

The Commission is aware that virtual organizations and associated individuals and entities increasingly are using distributed ledger technology to offer and sell instruments such as DAO Tokens to raise capital. These offers and sales have been referred to, among other things, as "Initial Coin Offerings" or "Token Sales." Accordingly, the Commission deems it appropriate and in the public interest to issue this Report in order to stress that the U.S. federal securities law may apply to various activities, including distributed ledger technology, depending on the particular facts and circumstances, without regard to the form of the organization or technology used to effectuate a particular offer or sale. In this Report, the Commission considers the particular facts and circumstances of the offer and sale of DAO Tokens to demonstrate the application of existing U.S. federal securities laws to this new paradigm.

A. Section 5 of the Securities Act

The registration provisions of the Securities Act contemplate that the offer or sale of securities to the public must be accompanied by the "full and fair disclosure" afforded by registration with the Commission and delivery of a statutory prospectus containing information necessary to enable prospective purchasers to make an informed investment decision. Registration entails disclosure of detailed "information about the issuer's financial condition, the identity and background of management, and the price and amount of securities to be offered … ." *SEC v. Cavanagh*, 1 F. Supp. 2d 337, 360 (S.D.N.Y. 1998), *aff'd*, 155 F.3d 129 (2d Cir. 1998). "The registration statement is designed to assure public access to material facts bearing on the value of publicly traded securities and is central to the Act's comprehensive scheme for protecting public investors." *SEC v. Aaron*, 605 F.2d 612, 618 (2d Cir. 1979) (citing *SEC v. Ralston Purina Co.*, 346 U.S. 119, 124 (1953)), *vacated on other grounds*, 446 U.S. 680 (1980). Section 5(a) of the Securities Act provides that, unless a registration statement is in effect as to a security, it is unlawful for any person, directly or indirectly, to engage in the offer or sale of securities in interstate commerce. Section 5(c) of the Securities Act provides a similar prohibition against offers to sell, or offers to buy, unless a registration statement has been filed. Thus, both Sections 5(a) and 5(c) of the Securities Act prohibit the unregistered offer or sale of securities in interstate commerce. 15 U.S.C. § 77e(a) and (c). Violations of Section 5 do not require scienter. *SEC v. Universal Major Indus. Corp.*, 546 F.2d 1044, 1047 (2d Cir. 1976).

[34] *Id.*

B. DAO Tokens Are Securities

1. Foundational Principles of the Securities Laws Apply to Virtual Organizations or Capital Raising Entities Making Use of Distributed Ledger Technology

Under Section 2(a)(1) of the Securities Act and Section 3(a)(10) of the Exchange Act, a security includes "an investment contract." *See* 15 U.S.C. §§ 77b-77c. An investment contract is an investment of money in a common enterprise with a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others. *See SEC v. Edwards*, 540 U.S. 389, 393 (2004); *SEC v. W.J. Howey Co.*, 328 U.S. 293, 301 (1946); *see also United Housing Found., Inc. v. Forman*, 421 U.S. 837, 852-53 (1975) (The "touchstone" of an investment contract "is the presence of an investment in a common venture premised on a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others."). This definition embodies a "*flexible rather than a static principle*, one that is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits." *Howey*, 328 U.S. at 299 (emphasis added). The test "permits the fulfillment of the statutory purpose of compelling full and fair disclosure relative to the issuance of 'the many types of instruments that in our commercial world fall within the ordinary concept of a security.'" *Id.* In analyzing whether something is a security, "form should be disregarded for substance," *Tcherepnin v. Knight*, 389 U.S. 332, 336 (1967), "and the emphasis should be on economic realities underlying a transaction, and not on the name appended thereto." *United Housing Found.*, 421 U.S. at 849.

2. Investors in The DAO Invested Money

In determining whether an investment contract exists, the investment of "money" need not take the form of cash. *See, e.g., Uselton v. Comm. Lovelace Motor Freight, Inc.*, 940 F.2d 564, 574 (10th Cir. 1991) ("[I]n spite of *Howey's* reference to an 'investment of money,' it is well established that cash is not the only form of contribution or investment that will create an investment contract.").

Investors in The DAO used ETH to make their investments, and DAO Tokens were received in exchange for ETH. Such investment is the type of contribution of value that can create an investment contract under *Howey*. *See SEC v. Shavers*, No. 4:13-CV-416, 2014 WL 4652121, at *1 (E.D. Tex. Sept. 18, 2014) (holding that an investment of Bitcoin, a virtual currency, meets the first prong of *Howey*); *Uselton*, 940 F.2d at 574 ("[T]he 'investment' may take the form of 'goods and services,' or some other 'exchange of value'.") (citations omitted).

3. With a Reasonable Expectation of Profits

Investors who purchased DAO Tokens were investing in a common enterprise and reasonably expected to earn profits through that enterprise when they sent ETH to The DAO's Ethereum Blockchain address in exchange for DAO Tokens. "[P]rofits" include "dividends, other periodic payments, or the increased value of the investment." *Edwards*, 540 U.S. at 394. As described above, the various promotional materials disseminated by Slock.it and its co-founders informed investors that The DAO was a for-profit entity whose objective was to fund

projects in exchange for a return on investment.[35] The ETH was pooled and available to The DAO to fund projects. The projects (or "contracts") would be proposed by Contractors. If the proposed contracts were whitelisted by Curators, DAO Token holders could vote on whether The DAO should fund the proposed contracts. Depending on the terms of each particular contract, DAO Token holders stood to share in potential profits from the contracts. Thus, a reasonable investor would have been motivated, at least in part, by the prospect of profits on their investment of ETH in The DAO.

4. Derived from the Managerial Efforts of Others

a. The Efforts of Slock.it, Slock.it's Co-Founders, and The DAO's Curators Were Essential to the Enterprise

Investors' profits were to be derived from the managerial efforts of others—specifically, Slock.it and its co-founders, and The DAO's Curators. The central issue is "whether the efforts made by those other than the investor are the undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise." *SEC v. Glenn W. Turner Enters., Inc.*, 474 F.2d 476, 482 (9th Cir. 1973). The DAO's investors relied on the managerial and entrepreneurial efforts of Slock.it and its co-founders, and The DAO's Curators, to manage The DAO and put forth project proposals that could generate profits for The DAO's investors.

Investors' expectations were primed by the marketing of The DAO and active engagement between Slock.it and its co-founders with The DAO and DAO Token holders. To market The DAO and DAO Tokens, Slock.it created The DAO Website on which it published the White Paper explaining how a DAO Entity would work and describing their vision for a DAO Entity. Slock.it also created and maintained other online forums that it used to provide information to DAO Token holders about how to vote and perform other tasks related to their investment. Slock.it appears to have closely monitored these forums, answering questions from DAO Token holders about a variety of topics, including the future of The DAO, security concerns, ground rules for how The DAO would work, and the anticipated role of DAO Token holders. The creators of The DAO held themselves out to investors as experts in Ethereum, the blockchain protocol on which The DAO operated, and told investors that they had selected persons to serve as Curators based on their expertise and credentials. Additionally, Slock.it told investors that it expected to put forth the first substantive profit-making contract proposal—a blockchain venture in its area of expertise. Through their conduct and marketing materials, Slock.it and its co-founders led investors to believe that they could be relied on to provide the significant managerial efforts required to make The DAO a success.

Investors in The DAO reasonably expected Slock.it and its co-founders, and The DAO's Curators, to provide significant managerial efforts after The DAO's launch. The expertise of The DAO's creators and Curators was critical in monitoring the operation of The DAO, safeguarding investor funds, and determining whether proposed contracts should be put for a

[35] That the "projects" could encompass services and the creation of goods for use by DAO Token holders does not change the core analysis that investors purchased DAO Tokens with the expectation of earning profits from the efforts of others.

vote. Investors had little choice but to rely on their expertise. At the time of the offering, The DAO's protocols had already been pre-determined by Slock.it and its co-founders, including the control that could be exercised by the Curators. Slock.it and its co-founders chose the Curators, whose function it was to: (1) vet Contractors; (2) determine whether and when to submit proposals for votes; (3) determine the order and frequency of proposals that were submitted for a vote; and (4) determine whether to halve the default quorum necessary for a successful vote on certain proposals. Thus, the Curators exercised significant control over the order and frequency of proposals, and could impose their own subjective criteria for whether the proposal should be whitelisted for a vote by DAO Token holders. DAO Token holders' votes were limited to proposals whitelisted by the Curators, and, although any DAO Token holder could put forth a proposal, each proposal would follow the same protocol, which included vetting and control by the current Curators. While DAO Token holders could put forth proposals to replace a Curator, such proposals were subject to control by the current Curators, including whitelisting and approval of the new address to which the tokens would be directed for such a proposal. In essence, Curators had the power to determine whether a proposal to remove a Curator was put to a vote.[36]

And, Slock.it and its co-founders did, in fact, actively oversee The DAO. They monitored The DAO closely and addressed issues as they arose, proposing a moratorium on all proposals until vulnerabilities in The DAO's code had been addressed and a security expert to monitor potential attacks on The DAO had been appointed. When the Attacker exploited a weakness in the code and removed investor funds, Slock.it and its co-founders stepped in to help resolve the situation.

b. DAO Token Holders' Voting Rights Were Limited

Although DAO Token holders were afforded voting rights, these voting rights were limited. DAO Token holders were substantially reliant on the managerial efforts of Slock.it, its co-founders, and the Curators.[37] Even if an investor's efforts help to make an enterprise profitable, those efforts do not necessarily equate with a promoter's significant managerial efforts or control over the enterprise. *See, e.g.*, *Glenn W. Turner*, 474 F.2d at 482 (finding that a multi-level marketing scheme was an investment contract and that investors relied on the promoter's managerial efforts, despite the fact that investors put forth the majority of the labor that made the enterprise profitable, because the promoter dictated the terms and controlled the scheme itself); *Long v. Shultz*, 881 F.2d 129, 137 (5th Cir. 1989) ("An investor may authorize the assumption of particular risks that would create the possibility of greater profits or losses but still depend on a third party for all of the essential managerial efforts without which the risk could not

[36] DAO Token holders could put forth a proposal to split from The DAO, which would result in the creation of a new DAO Entity with a new Curator. Other DAO Token holders would be allowed to join the new DAO Entity as long as they voted yes to the original "split" proposal. Unlike all other contract proposals, a proposal to split did not require a deposit or a quorum, and it required a seven-day debating period instead of the minimum two-week debating period required for other proposals.

[37] Because, as described above, DAO Token holders were incentivized either to vote yes or to abstain from voting, the results of DAO Token holder voting would not necessarily reflect the actual view of a majority of DAO Token holders.

pay off."). *See also generally SEC v. Merchant Capital, LLC*, 483 F.3d 747 (11th Cir. 2007) (finding an investment contract even where voting rights were provided to purported general partners, noting that the voting process provided limited information for investors to make informed decisions, and the purported general partners lacked control over the information in the ballots).

The voting rights afforded DAO Token holders did not provide them with meaningful control over the enterprise, because (1) DAO Token holders' ability to vote for contracts was a largely perfunctory one; and (2) DAO Token holders were widely dispersed and limited in their ability to communicate with one another.

First, as discussed above, DAO Token holders could only vote on proposals that had been cleared by the Curators.[38] And that clearance process did not include any mechanism to provide DAO Token holders with sufficient information to permit them to make informed voting decisions. Indeed, based on the particular facts concerning The DAO and the few draft proposals discussed in online forums, there are indications that contract proposals would not have necessarily provide enough information for investors to make an informed voting decision, affording them less meaningful control. For example, the sample contract proposal attached to the White Paper included little information concerning the terms of the contract. Also, the Slock.it co-founders put forth a draft of their own contract proposal and, in response to questions and requests to negotiate the terms of the proposal (posted to a DAO forum), a Slock.it founder explained that the proposal was intentionally vague and that it was, in essence, a take it or leave it proposition not subject to negotiation or feedback. *See, e.g., SEC v. Shields*, 744 F.3d 633, 643-45 (10th Cir. 2014) (in assessing whether agreements were investment contracts, court looked to whether "the investors actually had the type of control reserved under the agreements to obtain access to information necessary to protect, manage, and control their investments at the time they purchased their interests.").

Second, the pseudonymity and dispersion of the DAO Token holders made it difficult for them to join together to effect change or to exercise meaningful control. Investments in The DAO were made pseudonymously (such that the real-world identities of investors are not apparent), and there was great dispersion among those individuals and/or entities who were invested in The DAO and thousands of individuals and/or entities that traded DAO Tokens in the secondary market—an arrangement that bears little resemblance to that of a genuine general partnership. *Cf. Williamson v. Tucker*, 645 F.2d 404, 422-24 (5th Cir. 1981) ("[O]ne would not expect partnership interests sold to large numbers of the general public to provide any real partnership control; at some point there would be so many [limited] partners that a partnership vote would be more like a corporate vote, each partner's role having been diluted to the level of a single shareholder in a corporation.").[39] Slock.it did create and maintain online forums on which

[38] Because, in part, The DAO never commenced its business operations funding projects, this Report does not analyze the question whether anyone associated with The DAO was an "[i]nvestment adviser" under Section 202(a)(11) of the Investment Advisers Act of 1940 ("Advisers Act"). *See* 15 U.S.C. § 80b-2(a)(11). Those who would use virtual organizations should consider their obligations under the Advisers Act.

[39] The Fifth Circuit in *Williamson* stated that:

investors could submit posts regarding contract proposals, which were not limited to use by DAO Token holders (anyone was permitted to post). However, DAO Token holders were pseudonymous, as were their posts to the forums. Those facts, combined with the sheer number of DAO Token holders, potentially made the forums of limited use if investors hoped to consolidate their votes into blocs powerful enough to assert actual control. This was later demonstrated through the fact that DAO Token holders were unable to effectively address the Attack without the assistance of Slock.it and others. The DAO Token holders' pseudonymity and dispersion diluted their control over The DAO. *See Merchant Capital*, 483 F.3d at 758 (finding geographic dispersion of investors weighing against investor control).

These facts diminished the ability of DAO Token holders to exercise meaningful control over the enterprise through the voting process, rendering the voting rights of DAO Token holders akin to those of a corporate shareholder. *Steinhardt Group, Inc. v. Citicorp.*, 126 F.3d 144, 152 (3d Cir. 1997) ("It must be emphasized that the assignment of nominal or limited responsibilities to the participant does not negate the existence of an investment contract; where the duties assigned are so narrowly circumscribed as to involve little real choice of action … a security may be found to exist … . [The] emphasis must be placed on economic reality.") (citing *SEC v. Koscot Interplanetary, Inc.*, 497 F.2d 473, 483 n. 14 (5th Cir. 1974)).

By contract and in reality, DAO Token holders relied on the significant managerial efforts provided by Slock.it and its co-founders, and The DAO's Curators, as described above. Their efforts, not those of DAO Token holders, were the "undeniably significant" ones, essential to the overall success and profitability of any investment into The DAO. *See Glenn W. Turner*, 474 F.2d at 482.

C. Issuers Must Register Offers and Sales of Securities Unless a Valid Exemption Applies

The definition of "issuer" is broadly defined to include "every person who issues or proposes to issue any security" and "person" includes "any unincorporated organization." 15 U.S.C. § 77b(a)(4). The term "issuer" is flexibly construed in the Section 5 context "as issuers devise new ways to issue their securities and the definition of a security itself expands." *Doran v. Petroleum Mgmt. Corp.*, 545 F.2d 893, 909 (5th Cir. 1977); *accord SEC v. Murphy*, 626 F.2d 633, 644 (9th Cir. 1980) ("[W]hen a person [or entity] organizes or sponsors the organization of

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> A general partnership or joint venture interest can be designated a security if the investor can establish, for example, that (1) an agreement among the parties leaves so little power in the hands of the partner or venture that the arrangement in fact distributes power as would a limited partnership; or (2) the partner or venturer is so inexperienced and unknowledgeable in business affairs that he is incapable of intelligently exercising his partnership or venture powers; or (3) the partner or venturer is so dependent on some unique entrepreneurial or managerial ability of the promoter or manager that he cannot replace the manager of the enterprise or otherwise exercise meaningful partnership or venture powers.

Williamson, 645 F.2d at 424 & n.15 (court also noting that, "this is not to say that other factors could not also give rise to such a dependence on the promoter or manager that the exercise of partnership powers would be effectively precluded.").

limited partnerships and is primarily responsible for the success or failure of the venture for which the partnership is formed, he will be considered an issuer … .").

The DAO, an unincorporated organization, was an issuer of securities, and information about The DAO was "crucial" to the DAO Token holders' investment decision. *See Murphy*, 626 F.2d at 643 ("Here there is no company issuing stock, but instead, a group of individuals investing funds in an enterprise for profit, and receiving in return an entitlement to a percentage of the proceeds of the enterprise.") (citation omitted). The DAO was "responsible for the success or failure of the enterprise," and accordingly was the entity about which the investors needed information material to their investment decision. *Id.* at 643-44.

During the Offering Period, The DAO offered and sold DAO Tokens in exchange for ETH through The DAO Website, which was publicly-accessible, including to individuals in the United States. During the Offering Period, The DAO sold approximately 1.15 billion DAO Tokens in exchange for a total of approximately 12 million ETH, which was valued in USD, at the time, at approximately $150 million. Because DAO Tokens were securities, The DAO was required to register the offer and sale of DAO Tokens, unless a valid exemption from such registration applied.

Moreover, those who participate in an unregistered offer and sale of securities not subject to a valid exemption are liable for violating Section 5. *See, e.g.*, *Murphy*, 626 F.2d at 650-51 ("[T]hose who ha[ve] a necessary role in the transaction are held liable as participants.") (citing *SEC v. North Am. Research & Dev. Corp.*, 424 F.2d 63, 81 (2d Cir. 1970); *SEC v. Culpepper*, 270 F.2d 241, 247 (2d Cir. 1959); *SEC v. International Chem. Dev. Corp.*, 469 F.2d 20, 28 (10th Cir. 1972); *Pennaluna & Co. v. SEC*, 410 F.2d 861, 864 n.1, 868 (9th Cir. 1969)); *SEC v. Softpoint, Inc.*, 958 F. Supp 846, 859-60 (S.D.N.Y. 1997) ("The prohibitions of Section 5 … sweep[] broadly to encompass 'any person' who participates in the offer or sale of an unregistered, non-exempt security."); *SEC v. Chinese Consol. Benevolent Ass'n.*, 120 F.2d 738, 740-41 (2d Cir. 1941) (defendant violated Section 5(a) "because it engaged in selling unregistered securities" issued by a third party "when it solicited offers to buy the securities 'for value'").

D. A System that Meets the Definition of an Exchange Must Register as a National Securities Exchange or Operate Pursuant to an Exemption from Such Registration

Section 5 of the Exchange Act makes it unlawful for any broker, dealer, or exchange, directly or indirectly, to effect any transaction in a security, or to report any such transaction, in interstate commerce, unless the exchange is registered as a national securities exchange under Section 6 of the Exchange Act, or is exempted from such registration. *See* 15 U.S.C. §78e. Section 3(a)(1) of the Exchange Act defines an "exchange" as "any organization, association, or group of persons, whether incorporated or unincorporated, which constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange as that term is generally understood … ." 15 U.S.C. § 78c(a)(1).

Exchange Act Rule 3b-16(a) provides a functional test to assess whether a trading system meets the definition of exchange under Section 3(a)(1). Under Exchange Act Rule 3b-16(a), an

organization, association, or group of persons shall be considered to constitute, maintain, or provide "a marketplace or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange," if such organization, association, or group of persons: (1) brings together the orders for securities of multiple buyers and sellers; and (2) 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.[40]

A system that meets the criteria of Rule 3b-16(a), and is not excluded under Rule 3b-16(b), must register as a national securities exchange pursuant to Sections 5 and 6 of the Exchange Act[41] or operate pursuant to an appropriate exemption. One frequently used exemption is for alternative trading systems ("ATS").[42] Rule 3a1-1(a)(2) exempts from the definition of "exchange" under Section 3(a)(1) an ATS that complies with Regulation ATS,[43] which includes, among other things, the requirement to register as a broker-dealer and file a Form ATS with the Commission to provide notice of the ATS's operations. Therefore, an ATS that operates pursuant to the Rule 3a1-1(a)(2) exemption and complies with Regulation ATS would not be subject to the registration requirement of Section 5 of the Exchange Act.

The Platforms that traded DAO Tokens appear to have satisfied the criteria of Rule 3b-16(a) and do not appear to have been excluded from Rule 3b-16(b). As described above, the Platforms provided users with an electronic system that matched orders from multiple parties to buy and sell DAO Tokens for execution based on non-discretionary methods.

IV. Conclusion and References for Additional Guidance

Whether or not a particular transaction involves the offer and sale of a security—regardless of the terminology used—will depend on the facts and circumstances, including the

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[40] *See* 17 C.F.R. § 240.3b-16(a). The Commission adopted Rule 3b-16(b) to exclude explicitly certain systems that the Commission believed did not meet the exchange definition. These systems include systems that merely route orders to other execution facilities and systems that allow persons to enter orders for execution against the bids and offers of a single dealer system. *See* Securities Exchange Act Rel. No. 40760 (Dec. 8, 1998), 63 FR 70844 (Dec. 22, 1998) (Regulation of Exchanges and Alternative Trading Systems) ("Regulation ATS"), 70852.

[41] 15 U.S.C. § 78e. A "national securities exchange" is an exchange registered as such under Section 6 of the Exchange Act. 15 U.S.C. § 78f.

[42] Rule 300(a) of Regulation ATS promulgated under the Exchange Act provides that an ATS is:

> any organization, association, person, group of persons, or system: (1) [t]hat constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange within the meaning of [Exchange Act Rule 3b-16]; and (2) [t]hat does not: (i) [s]et rules governing the conduct of subscribers other than the conduct of subscribers' trading on such [ATS]; or (ii) [d]iscipline subscribers other than by exclusion from trading.

Regulation ATS, *supra* note 40, Rule 300(a).

[43] *See* 17 C.F.R. § 240.3a1-1(a)(2). Rule 3a1-1 also provides two other exemptions from the definition of "exchange" for any ATS operated by a national securities association, and any ATS not required to comply with Regulation ATS pursuant to Rule 301(a) of Regulation ATS. *See* 17 C.F.R. §§ 240.3a1-1(a)(1) and (3).

economic realities of the transaction. Those who offer and sell securities in the United States must comply with the federal securities laws, including the requirement to register with the Commission or to qualify for an exemption from the registration requirements of the federal securities laws. The registration requirements are designed to provide investors with procedural protections and material information necessary to make informed investment decisions. These requirements apply to those who offer and sell securities in the United States, regardless whether the issuing entity is a traditional company or a decentralized autonomous organization, regardless whether those securities are purchased using U.S. dollars or virtual currencies, and regardless whether they are distributed in certificated form or through distributed ledger technology. In addition, any entity or person engaging in the activities of an exchange, such as bringing together the orders for securities of multiple buyers and sellers using established non-discretionary methods under which such orders interact with each other and buyers and sellers entering such orders agree upon the terms of the trade, must register as a national securities exchange or operate pursuant to an exemption from such registration.

To learn more about registration requirements under the Securities Act, please visit the Commission's website here. To learn more about the Commission's registration requirements for investment companies, please visit the Commission's website here. To learn more about the Commission's registration requirements for national securities exchanges, please visit the Commission's website here. To learn more about alternative trading systems, please see the Regulation ATS adopting release here.

For additional guidance, please see the following Commission enforcement actions involving virtual currencies:

- *SEC v. Trendon T. Shavers and Bitcoin Savings and Trust*, Civil Action No. 4:13-CV-416 (E.D. Tex., complaint filed July 23, 2013)
- *In re Erik T. Voorhees*, Rel. No. 33-9592 (June 3, 2014)
- *In re BTC Trading, Corp. and Ethan Burnside*, Rel. No. 33-9685 (Dec. 8, 2014)
- *SEC v. Homero Joshua Garza, Gaw Miners, LLC, and ZenMiner, LLC (d/b/a Zen Cloud)*, Civil Action No. 3:15-CV-01760 (D. Conn., complaint filed Dec. 1, 2015)
- *In re Bitcoin Investment Trust and SecondMarket, Inc.*, Rel. No. 34-78282 (July 11, 2016)
- *In re Sunshine Capital, Inc*., File No. 500-1 (Apr. 11, 2017)

And please see the following investor alerts:

- *Bitcoin and Other Virtual Currency-Related Investments* (May 7, 2014)
- *Ponzi Schemes Using Virtual Currencies* (July 2013)

By the Commission.