

DECONSTRUCTING THE DAO: THE NEED FOR LEGAL RECOGNITION AND THE APPLICATION OF SECURITIES LAWS TO DECENTRALIZED ORGANIZATIONS

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INTRODUCTION

By late May 2016, more than 10,000 people from across the globe anonymously invested over \$168 million into the DAO¹ (Decentralized Autonomous Organization), making it the most successful crowdfunded venture ever.² The DAO is the most prominent example³ of a decentralized organization.⁴ The DAO is a venture capital firm⁵ run by a network of machines that operate on the same basic principles that drive the Bitcoin digital currency.⁶ The DAO was designed to raise funds for

¹ Cade Metz, *The Biggest Crowdfunding Project Ever—the DAO—Is Kind of a Mess*, WIRED: BUS. (June 6, 2016, 7:00 AM), <https://www.wired.com/2016/06/biggest-crowdfunding-project-ever-dao-mess>. For sake of clarity, when this Note refers to “the DAO,” it refers to The Decentralized Autonomous Organization led by the following signatories: Timon Rapp, Gian Bochler, Vitalik Buterin, Vlad Zamfir, and Griff Green. Griff Green, *The DAO’s Edge Cases Multisig (Post Hard Fork)*, MEDIUM (Aug. 2, 2016), <https://medium.com/edge-cases-multisig-phf-official-channel/the-daos-edge-cases-multisig-post-hard-fork-2f107380bd61#.djbaulf58>.

² Michael del Castillo, *The DAO: Or How a Leaderless Ethereum Project Raised \$50 Million*, COINDESK (May 12, 2016, 9:19 PM), <http://www.coindesk.com/the-dao-just-raised-50-million-but-what-is-it>. At the time this Note was written, this was the most successful crowdfunded venture. Nathaniel Popper, *A Venture Fund with Plenty of Virtual Capital, but No Capitalist*, N.Y. TIMES (May 21, 2016), http://www.nytimes.com/2016/05/22/business/dealbook/crypto-ether-bitcoin-currency.html?_r=0 (“The start-up, a sort of venture capital fund that calls itself the Decentralized Autonomous Organization, has essentially come out of nowhere in the last month and attracted about \$152 million, at last count . . . making it the most successful crowdfunded venture ever, by a significant margin.”).

³ The DAO is one of many decentralized organizations, but its rapid success has made it one of the most prominent. ALLEN & OVERY LLP, DECENTRALIZED AUTONOMOUS ORGANIZATIONS, (July 2016), <http://www.allenoverly.com/SiteCollectionDocuments/Article%20Decentralized%20Autonomous%20Organizations.pdf>.

⁴ *Id.* For an explanation of a decentralized organization, see discussion *infra* Section I.C.

⁵ A venture capital firm is where a number of investors pool their money (i.e., capital) to create a venture capital firm. The investors entrust management in one manager to monitor the investments, and the funds support an investment that the investor perceives as risky. The investment is risky either because the company is new and not well-established or has not been profitable for long. Christopher Gulinello, *Engineering a Venture Capital Market and the Effects of Government Control on Private Ordering: Lessons from the Taiwan Experience*, 37 GEO. WASH. INT’L L. REV. 845 (2005); see also Richard J. Testa, *Chapter 7. Venture Capital Financing*, in *STARTING UP AND ADVISING AN EMERGING MASSACHUSETTS BUSINESS* (Lawrence H. Gennari ed., 2005). Here, this means that investors contribute capital to the DAO, which in turn invests in various startup projects. See ALLEN & OVERY LLP, *supra* note 3.

⁶ Metz, *supra* note 1. Bitcoin is a form of digital currency (i.e., cryptocurrency) used to buy things electronically. *What Is Bitcoin?*, COINDESK, <http://www.coindesk.com/information/what-is-bitcoin> (last updated Jan. 26, 2018). Unlike conventional currency, bitcoin is decentralized, which means that no single institution controls the bitcoin network and it is widely accessible. *Id.* Bitcoin runs on open source software, which means that anyone can look at the code online and make sure that it is running appropriately. *Id.* Because of this characteristic, it is also anonymous and completely transparent. *Id.* Bitcoin runs on a blockchain, which is essentially a ledger online where anyone with the public internet address can tell how many bitcoins are at that address and how the network is functioning. *Id.* For background on blockchain technology, see also discussion *infra* Section I.A.

projects run on the Ethereum blockchain,⁷ dispersing the funds based on the votes of members.⁸

However, the success of the DAO was short-lived.⁹ On June 12, 2016, one of the DAO's creators announced that a bug¹⁰ had been found in the DAO software, but that no funds were at risk.¹¹ At the time, over fifty proposals were waiting for DAO members to vote on whether to fund the projects.¹² While programmers were working on fixing the bug in the software, an unknown attacker¹³ began to drain the DAO of Ether¹⁴ collected from the sale of its tokens.¹⁵ By June 18, 2016, only six days later, the attacker transferred more than \$3,600,000 Ether from the DAO into other software with the same structure¹⁶ as the DAO—dropping the price of Ether from over twenty dollars, to under thirteen dollars.¹⁷

This breach and manipulation of the code could potentially expose the members of the DAO to liability in a number of ways.¹⁸ First, because the DAO is decentralized, there were no terms and conditions or governing laws, which means that the attacker could transfer the funds without repercussions.¹⁹ However, the creators of the DAO could

⁷ Ethereum is a decentralized platform, which means that it has no central controller and is visible to anyone with the internet address. Hristo Georgiev, *The Hack That Changed the Blockchain Perspective*, MWR LABS (Aug. 11, 2016), <https://labs.mwrinfosecurity.com/blog/the-hack-that-changed-the-blockchain-perspective>. Ethereum is similar to Bitcoin but provides users with more functionality. *Id.* Ethereum is the second most popular cryptocurrency behind bitcoin. *Id.*; see also discussion *infra* Section I.A.

⁸ Investors in the DAO receive voting rights proportionate to their investment and these votes in turn determine which projects will be funded. Michael del Castillo, *The Hard Fork: What's About to Happen to Ethereum and the DAO*, COINDESK (July 18, 2016, 8:03 PM), <https://www.coindesk.com/hard-fork-ethereum-dao>; see also David Siegel, *Understanding the DAO Attack*, COINDESK (June 25, 2016, 4:00 PM), <http://www.coindesk.com/understanding-dao-hack-journalists>.

⁹ del Castillo, *supra* note 8; Siegel, *supra* note 8.

¹⁰ Siegel, *supra* note 8. This bug allowed an unknown attacker to manipulate the code and start draining the DAO. *Id.* Specifically, this bug was a “recursive call bug.” *Id.* This means that each time the DAO would start to run code to update the balance, it would repeatedly transfer Ether to the attacker each time. See also Georgiev, *supra* note 7.

¹¹ Siegel, *supra* note 8; Georgiev, *supra* note 10.

¹² Siegel, *supra* note 8.

¹³ There is debate regarding whether the person who manipulated the code is appropriately coined a “hacker.” For this background information, this Note will use the term “attacker.”

¹⁴ Ether is a form of payment made by the clients of the Ethereum platform to the machines executing requested operations. *ETHER: The Crypto-Fuel for the Ethereum Network*, ETHEREUM, <https://www.ethereum.org/ether> (last visited Feb. 15, 2018).

¹⁵ Siegel, *supra* note 8.

¹⁶ *Id.* Specifically, this other software was coined a “child DAO,” because it had the same structure as the DAO itself. *Id.*

¹⁷ *Id.*

¹⁸ See discussion *infra* Section II.C.

¹⁹ Georgiev, *supra* note 7. Without terms and conditions, an attack or manipulation in the DAO software would not constitute a breach or violation. Without a breach of some duty or right, there is no remedy available to other members of the DAO. *Id.*; Ian Allison, *Legal Experts Examine the DAO Attack and Ethereum Fork*, INT'L BUS. TIMES (June 21, 2016, 7:47 AM),

potentially be liable for problems like the attack, and investors could potentially be liable in accepting responsibilities of which they were unaware.²⁰ Moreover, several lawyers raised concerns that the DAO overstepped its crowdfunding capabilities and ran afoul of securities laws in several countries.²¹ The value of decentralized organizations in the global market requires the U.S. legal system to address the legal status of these entities.²² Despite the support the DAO has received from investors globally, the legal status of the DAO remains uncertain.²³ Decentralized organizations are not currently recognized as legal entities, and it is not clear who bears legal rights and responsibilities.²⁴

This Note will begin with background information on the construction of a blockchain and its function in decentralized organizations like the DAO, followed by a discussion on smart contracts and their role in decentralized organizations and the DAO. This Note will then analyze the legal status of partnerships and joint ventures. This Note proposes that the U.S. legal system must clarify the legal status of these organizations and as such should classify the DAO as a general partnership. Assuming the DAO is a general partnership, the question arises as to whether shareholders in the DAO have interests that would be classified as securities under U.S. securities laws. Given its structure, the DAO and similar decentralized organizations should be classified as general partnerships under U.S. law, with the partnership interests classified as securities subject to securities regulation.

<http://www.ibtimes.co.uk/legal-experts-examine-dao-attack-ethereum-fork-1566318>.

²⁰ Georgiev, *supra* note 7. These responsibilities could be a waiver of claims against such an attack, or an assumption of joint liability.

²¹ *Id.* It should also be noted that the application of securities laws and liability in countries outside of the United States is beyond the scope of this Note.

²² See discussion *infra* Section III.A.

²³ Christoph Jentzsch, Decentralized Autonomous Organization to Automate Governance (unpublished White Paper), <https://download.slock.it/public/DAO/WhitePaper.pdf> (last visited Nov. 7, 2017) (“[T]he legal status of DAOs remains the subject of active and vigorous debate and discussion. . . . Some have said that they are autonomous code and can operate independently of legal systems; others have said that they must be owned or operate[d] by humans or human created entities.”).

²⁴ ALLEN & OVERY LLP, *supra* note 3, at 5. (“It is possible that in the abstract a DAO would fall within the categories of a general partnership or joint venture agreement between the participants. . . . While a DAO might have extensive rules governing its conduct between internal members, those rules may be of little use when interacting with an external jurisdiction’s legal system.”).

I. BACKGROUND

A. *The Basics of the Blockchain and Its Role in Decentralized Organizations*

Blockchain technology is often compared to a ledger or spreadsheet, where the same spreadsheet is duplicated thousands of times across a network of computers.²⁵ Comparing a blockchain to a spreadsheet, a blockchain is a network where the duplicated spreadsheet is regularly updated in each computer.²⁶ The spreadsheet²⁷ shares the information with every computer in the network, creating a database without any single location.²⁸ Because it is available to everyone in the network, information stored in the spreadsheet is public and easily verifiable on every computer.²⁹ When hosted by millions of computers at the same time, it creates a network accessible to anyone with internet access.³⁰ This spreadsheet is representative of how a blockchain functions.

In a blockchain, all members run copies of the code, contribute to it, and add entries systematically.³¹ Because it is decentralized and available to the public, it is transparent to all members and difficult to modify.³² A blockchain enables parties to securely send, receive, and record information through its network.³³ When parties want to conduct a transaction, the proposed transaction is distributed throughout the entire network³⁴ on the blockchain.³⁵ Once the network

²⁵ Ameer Rosic, *What Is Blockchain Technology? A Step-by-Step Guide for Beginners*, BLOCKGEEKS, <http://blockgeeks.com/guides/what-is-blockchain-technology> (last visited Feb. 17, 2018); Victor Li, *Bitcoin's Useful Backbone: Blockchain Technology Gains Use in Business, Finance and Contracts*, 102 A.B.A. J. 31 (2016).

²⁶ Rosic, *supra* note 25.

²⁷ The "spreadsheet" in this analogy is the blockchain.

²⁸ Rosic, *supra* note 25.

²⁹ *Id.*

³⁰ *Id.*

³¹ Li, *supra* note 25.

³² *Id.*

³³ Nicolette Kost De Sevres, Bart Chilton & Bradley Cohen, *The Blockchain Revolution, Smart Contracts and Financial Transactions*, 21 CYBERSPACE LAW. 3 (2016).

³⁴ Referring back to the spreadsheet example, picture a single transaction appearing on the spreadsheet on thousands of computers at the same time. Another way to think of blockchain technology is comparing it to a Google Docs document. A group of people share access to the document online. The contents of the document are visible to anyone with a link to the document, and anyone with the link can also modify and edit the document from their computer. In this sense, the same information is transmitted in each browser and creates a network. A blockchain operates in the same manner. Software code is stored in a blockchain and is available to anyone with the internet address. The blockchain allows everyone in the network to share, view, and modify code.

³⁵ Kost De Sevres, Chilton & Cohen, *supra* note 33.

confirms the transaction, it is recorded.³⁶ Because each transaction is recorded on the blockchain and is available to every member in the network, it creates a chain of stored transactions.³⁷ This not only prevents third parties from modifying the transactions, but also ensures that each transaction is recorded only once on the blockchain.³⁸

Blockchains play a crucial role in the formulation of decentralized organizations.³⁹ The DAO formally launched on July 30, 2015 on the Ethereum blockchain.⁴⁰ In the case of the DAO, the Ethereum blockchain allows for the organization to code its entire set of business rules and record them permanently in the blockchain.⁴¹ Decentralized organizations rely on blockchain technology and smart contracts⁴² as their primary or sole source of governance.⁴³ This is possible because blockchain technology allows smart contracts to self-execute without the need for a third party.⁴⁴

B. *Smart Contracts and Their Role in Decentralized Organizations*

Smart contracts are automated computer programs that enable the terms of a contract⁴⁵ to execute upon the occurrence of some event, without external intervention.⁴⁶ To develop a smart contract, the terms

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ Stephan Tual, *Ethereum Launches*, ETHEREUM (July 30, 2015), <https://blog.ethereum.org/2015/07/30/ethereum-launches>.

⁴¹ Kyle Cheung, *What Is Ethereum: The All Purpose Blockchain?*, HACKERNOON (Nov. 26, 2017), <https://hackernoon.com/ethereum-the-all-purpose-blockchain-7270f3088a19>; see also Etherium, *Etherium: The World Computer*, YOUTUBE (July 30, 2015), <https://www.youtube.com/watch?v=j23HnORQXvs>.

⁴² See discussion *infra* Section I.B.

⁴³ PRIMAVERA DE FILIPPI & AARON WRIGHT, CHAINED: BLOCKCHAIN TECHNOLOGY & THE LAW (forthcoming 2018) (manuscript at ch. 7, at 9) (on file with author) (explaining that “[d]ecentralized organizations are new forms of social organizations that rely on blockchain technologies and smart contracts as their main or exclusive source of governance”).

⁴⁴ *Id.* (manuscript at ch. 7, at 9–10).

[B]lockchains enable the deployment of self-executing and autonomous smart contracts, which are not run on any central server, but rather are executed in a distributed manner by an entire network. . . . With these capabilities, blockchain technologies enable the creation of decentralized networks consisting of vast groups of individuals who gain the ability to organize and spontaneously cooperate on a peer-to-peer basis—and, if desired, to transact value—with less of a need to rely on a centralized entity or intermediary.

Id.

⁴⁵ The terms of a contract in the context of a smart contract are the same terms that you would find in the traditional, written contract.

⁴⁶ Edward D. Baker, *Trustless Property Systems and Anarchy: How Trustless Transfer*

of a contract are translated into code and uploaded to a blockchain.⁴⁷ This in turn produces a decentralized smart contract accessible to everyone on the blockchain.⁴⁸ The clauses of the contract are programmed to automatically execute when pre-programmed conditions are satisfied.⁴⁹ This capability of the smart contract eliminates the need for a third party and allows for human judgment to be removed from certain processes.⁵⁰ Using smart contracts, once the parties agree to the set of terms, the network will execute the smart contract as written, allowing for the possibility of unbreakable contracts and enabling parties who do not know one another to enter into arrangements without fear of breach.⁵¹ Once smart contracts begin to run, they are difficult to stop, which means that once some event occurs, there is a very high probability that the terms of the contract will be executed.⁵²

For example, take John and Jane. John and Jane enter into a bet over which team will win the 2016 NBA Finals: the Cleveland Cavaliers or the Golden State Warriors. John wagers \$100 (or a token) that the Warriors will win, while Jane wagers the same on the Cavaliers. John and Jane each place their tokens into an account governed by the smart contract, and when the game is over, the smart contract verifies the winner through external, real world sources.⁵³ When the smart contract receives the relevant information (i.e., who won), the smart contract will autonomously be executed and immediately deliver or remove all tokens/funds to the respective accounts. This not only eliminates a human intermediary, but also prevents disputes because the terms of the

Technology Will Shape the Future of the Property Exchange, 45 SW. L. REV. 351, 360–61 (2015) (explaining that “smart contracts are ‘computer programs that can automatically execute the terms of a contract’” (footnote omitted)).

⁴⁷ See Kost De Sevres, Chilton & Cohen, *supra* note 33.

⁴⁸ Baker, *supra* note 46, at 362.

⁴⁹ *Id.* at 361. This means that upon the occurrence of some event, the code in the blockchain will trigger the terms of the contract. For example, if the code says that when User X transfers thirty dollars in Ether on the blockchain, User X will receive three Ether tokens. This means that when User X transfers thirty dollars in Ether, the terms in the smart contract will automatically execute as soon as the transaction is recorded and will automatically transfer three tokens to User X.

⁵⁰ *Id.* at 360 (“Smart [c]ontracts . . . allow you to solve common problems in a way that minimizes trust . . . [making] things more convenient by allowing human judgments to be taken out of the loop, thus allowing complete automation.” (internal quotation marks omitted)).

⁵¹ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 3, at 4) (“[W]ith smart contracts, it is possible to create unbreakable contracts—relying on the guaranteed certainty of code—enabling parties to enter into arrangements with people they do not know, and therefore do not trust. So long as the smart contract code accurately reflects an economic arrangement, contracting parties gain solace that the code will execute as written, preventing even an ill-intentioned party from acting in a self-interested manner.”).

⁵² *Id.* (manuscript at ch. 3, at 3).

⁵³ For a similar example, see Baker, *supra* note 46, at 362. Real world external sources include sources such as: The Associated Press, Reuters, ESPN, etc. *Id.*

smart contract are stored in the blockchain and available to all parties.⁵⁴

Smart contracts also allow for parties to the contract to adjust terms, whether by vote or through the occurrence of pre-programmed triggers.⁵⁵ By relying on computer code, the contractual agreements in smart contracts can be more precise than natural language agreements, which are often poorly drafted.⁵⁶ In turn, this could decrease the amount of breach of contract claims and allow parties to enter into anonymous transactions with users throughout the network, without fear of breach. Because smart contracts are written in code, they can also be tested before execution, unlike the traditional contract.⁵⁷

Where a smart contract's conditions depend upon real-world data,⁵⁸ oracles⁵⁹ can be developed to monitor and verify prices, performance, or other real-world events.⁶⁰ Smart contracts thereby create agreements, using code, that are irrevocable and potentially less ambiguous.⁶¹ Organizations using blockchains and smart contracts can thereby enter into contractual arrangements defined and enforced by code, without the need for human intervention to enforce performance.⁶²

The Ethereum blockchain⁶³ is the leading blockchain-based platform for smart contracts.⁶⁴ Digital contracts are not new,⁶⁵ but the

⁵⁴ *Id.* at 357 (“[S]mart contracts adjudicate simple transaction disputes, replacing expensive legal remedies with automated software programs.”).

⁵⁵ See DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 3, at 3–4). The authors describe smart contracts as having a “dynamic” quality, which means that they frequently update and change. *Id.*

⁵⁶ *Id.* (manuscript at ch.3, at 7). (“[D]espite best intentions, contracts routinely suffer from poor drafting. . . . [and b]y relying on machine-readable code, these contractual agreements can be more precise than natural language agreements.”).

⁵⁷ *Id.* (manuscript at ch. 3, at 8). This gives parties a greater ability to fully comprehend their obligations and the conditions upon which those obligations will be triggered. *Id.* at 8.

⁵⁸ For example, the price of a commodity future at a given time. *Id.* at 4–5.

⁵⁹ Oracles are external sources such as a Bloomberg reference price for a financial transaction. ALLEN & OVERY LLP, *supra* note 3, at 3.

⁶⁰ Kost De Sevres, Chilton & Cohen, *supra* note 33. In the case of financial transactions, smart derivatives contracts can be coded so that payment, clearing, and settlement occur automatically in a decentralized manner, without the need for a third-party. *Id.*

⁶¹ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 3). Because of smart contracts, parties can avoid formal, written agreements in natural language. *Id.* (manuscript at ch. 3, at 7). Instead, they can use code to enter into all or part of these agreements and in turn, create technical agreements that are “irrevocable, dynamic, and potentially less ambiguous.” *Id.* (manuscript at ch. 3, at 2). Because everyone in the network can view and modify the code, the terms of the agreements are accessible to all and the parties are better able to understand its terms.

⁶² *Id.* (manuscript at ch. 3, at 3) (“By relying on blockchains and smart contracts, parties and machines have the ability to enter into binding relationships, defined and enforced by code, without the need for human intervention or a trusted third-party to ensure performance.”).

⁶³ The DAO runs on the Ethereum blockchain.

⁶⁴ See Li, *supra* note 25 (“[T]he platform uses what it calls ‘next generation bitcoins’ (aka ethers) as its digital currency, and it can be used to create agreements so that parties will only get paid if they fulfill certain obligations. Ethereum eliminates ambiguities and potential areas

recent expansion of blockchain technology has led to the acceleration of computer-oriented contracts, like the DAO.⁶⁶ Smart contracts coded in the Ethereum blockchain allow DAO members to set up conditions to execute upon the occurrence of some event or input of data.⁶⁷ The benefits afforded by smart contracts may lead to an increase in blockchain technology for automated contracting in decentralized organizations.⁶⁸

C. What Are Decentralized Organizations?

Despite its name, the DAO is not a decentralized autonomous organization but is properly classified as a decentralized organization.⁶⁹ This Section explains what a decentralized organization is and how it compares to a decentralized autonomous organization.

A decentralized organization is a computer program with no single leader,⁷⁰ running on a peer-to-peer network⁷¹ that involves a set of users

of confusion so that each party is kept aware of its obligations.”).

⁶⁵ See Baker, *supra* note 46, at 360. Although Baker argues that “smart contracts don’t make anything possible that was previously impossible,” his claim potentially undermines the innovation of this technology. *Id.* (quotation marks omitted); see also DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 3, at 1) (“Crude forms of digital contracts have existed since the 1970s. . . . Some firms. . . began to employ Electronic Data Interchange (EDI) systems to communicate electronically with one another.”).

⁶⁶ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 8, at 1–2).

⁶⁷ Lance Koonce, *The Wild Distributed World: Get Ready for Radical Infrastructure Changes, from Blockchains to the Interplanetary File System to the Internet of Things*, DAVIS WRIGHT TREMAINE LLP: ADVISORIES & BLOGS (May 13, 2016), <https://www.dwt.com/the-wild-distributed-world-get-ready-for-radical-infrastructure-changes-from-blockchains-to-the-interplanetary-file-system-to-the-internet-of-things-05-13-2016>:

For example, an export company in one country could agree with an import company in another country to automatically send instructions to a shipper to send products to the importer when a certain amount of money is received. All of this would execute automatically without the need for third parties.

Id.

⁶⁸ See *id.*

⁶⁹ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 8, at 1 n.1) (“[I]mportantly, a decentralized autonomous organization is different from the decentralized organization. . . . DAOs are not governed by humans, but rather exclusively by artificial intelligence.”).

⁷⁰ Vitalik Buterin, *DAOs, DACs, DAs and More: An Incomplete Terminology Guide*, ETHEREUM (May 6, 2014), <https://blog.ethereum.org/2014/05/06/daos-dacs-das-and-more-an-incomplete-terminology-guide>. “The ideal of a decentralized autonomous organization is easy to describe: it is an entity that lives on the internet and exists autonomously, but also heavily relies on hiring individuals to perform certain tasks that the automaton itself cannot do.” *Id.*; see also del Castillo, *supra* note 2.

⁷¹ Tony Young, *Computer Fraud*, 23 WYO. LAW. 24, 25 (2000).

Peer-to-peer programs work by connecting together computers in peer-to-peer networks. That is, each computer gets information from every other machine on the network rather than from one big central server. The collective contents of the

interacting with each other according to protocol programmed through code and enforced on a blockchain.⁷² An appropriate way to explain a decentralized organization is to compare it to a traditional corporation.

A decentralized organization operates under the same basic concepts of a corporation but has a decentralized management structure—eliminating the board of directors, for example.⁷³ The structure of a simple corporation has three classes of members: shareholders, a board of directors, and other members involved in the corporate hierarchy.⁷⁴ To become a member in the corporation, shareholders purchase a slice⁷⁵ of the company.⁷⁶ Investors follow a set of bylaws determining how votes are cast, how they can select the board of directors, and so on.⁷⁷ Other members in the corporation, such as employees, are hired by either directors in the corporation or other employees in the hierarchy.⁷⁸ A decentralized organization involves a set of users interacting with each other and making decisions according to protocol specified in code⁷⁹ and enforced on the blockchain.⁸⁰ In a decentralized organization, the contract is coded in the blockchain and maintains a record of each shareholder's holdings and allows for

network are at the command of each connected machine and enable the direct exchange of services or data between computers. In this environment, the servers, desktops, and notebook PC's that make up a network become equal peers that contribute all or part of their resources—such as processing power or storage—to the overall computing effort.

Id.

⁷² Buterin, *supra* note 70 (explaining that an important difference between the two is that in a DO, humans make the decisions, but a DAO is able to make decisions “autonomously,” or for itself).

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ In other words, shares.

⁷⁶ Buterin, *supra* note 70.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.* “Instead of a hierarchical structure managed by a set of humans interacting in person and controlling property via the legal system, a decentralized organization involves a set of humans interacting with each other according to a protocol specified in code, and enforced on the blockchain.” *Id.*

⁸⁰ Kost De Sevres, Chilton & Cohen, *supra* note 33.

Blockchain technology refers to the use of a distributed, decentralized, immutable ledger for verifying and recording transactions. The technology enables parties to securely send, receive, and record value or information through a peer-to-peer network of computers. When parties wish to conduct a transaction on the blockchain, the proposed transaction is disseminated to the entire network. The transaction will only be recorded on a block once the network confirms the validity of the transaction based upon transactions recorded in all previous blocks. The resulting chain of blocks prevents third parties from manipulating the ledger and ensures that transactions are only recorded once.

Id.

shareholders to vote on various items through the blockchain.⁸¹

What distinguishes a decentralized autonomous organization from a decentralized organization is its autonomous capability.⁸² Decentralized autonomous organizations are essentially a set of smart contracts⁸³ that encode the bylaws of the entire organization.⁸⁴ This means that the traditional terms that make up a contract are coded and uploaded to the blockchain, creating a decentralized smart contract.⁸⁵ Unlike the traditional organization, the decentralized autonomous organization does not need to rely on a third party for recordkeeping or enforcement.⁸⁶ The blockchain stores information including how many tokens each participant owns in the company or its bylaws.⁸⁷ When certain pre-programmed conditions are satisfied, the decentralized autonomous organization automatically executes contractual clauses in the blockchain.⁸⁸

In this way, decentralized organizations and decentralized autonomous organizations are similar. However, although decentralized organizations are also made up of smart contracts, human intervention in some way is still required.⁸⁹ Decentralized organizations like the DAO depend on human involvement on each end of various transactions. In contrast, a decentralized autonomous organization is designed to run autonomously on a blockchain and is solely controlled by code, without any need for human involvement.⁹⁰ Although a

⁸¹ See Buterin, *supra* note 70 (noting that a decentralized organization may decide to use the legal system for protection or not, because someone can take a simple corporation and put it entirely on a blockchain, allowing for all shareholders to interact with each other directly according to the protocol specified in code).

⁸² In a decentralized organization, humans still make the decisions, but in a decentralized autonomous organization, the decentralized autonomous organization makes decisions for itself. *Id.*

⁸³ Blockchain technology is now used in smart contracts. Kost De Sevres, Chilton, & Cohen, *supra* note 33. To create a smart contract, the terms found in a traditional contract are coded and uploaded to the blockchain, creating a decentralized smart contract that does not rely on a third party for recordkeeping or enforcement. *Id.* Contractual clauses are automatically executed when pre-programmed conditions are satisfied. *Id.* This eliminates ambiguity and disagreement as to the terms of the contract. *Id.*

⁸⁴ See Obrea Poindexter & Temidayo Odusolu, *Code-Based Fund—the Future of Startup Funding*, LAW360 (Aug. 10, 2016, 12:55 PM), <https://www.law360.com/privateequity/articles/826986/code-based-fund-the-future-of-startup-funding>.

⁸⁵ Kost De Sevres, Chilton, & Cohen, *supra* note 33.

⁸⁶ *Id.*

⁸⁷ See ALLEN & OVERY LLP, *supra* note 3, at 2 (“The Ethereum network uses Ether as the currency for transaction fees on its blockchain for the purpose of recompensing the computers of the network for providing computing power to validate actions taken on the Ethereum blockchain. Ether is therefore the underlying fuel for all Ethereum transactions.”).

⁸⁸ Smart contracts are self-executing. See Kost De Sevres, Chilton, & Cohen, *supra* note 33.

⁸⁹ See Buterin, *supra* note 70 (“[A] decentralized organization involves a set of humans interacting with each other according to a protocol specified in code, and enforced on the blockchain.”).

⁹⁰ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 8, at 3).

decentralized autonomous organization can interact with the human users of the services it provides, it does not need its creators to function.⁹¹

Although decentralized organizations are largely self-executing and do not require recordkeeping or enforcement by a third party, they are not completely autonomous.⁹² While decentralized autonomous organizations have a large degree of autonomous intelligence, decentralized organizations still require heavy involvement from humans specifically interacting according to the protocol in its blockchain.⁹³

The DAO is a decentralized venture capital fund used to provide a hub for investors seeking to fund blockchain-based projects.⁹⁴ The DAO is funded by members using Ether.⁹⁵ When investors purchase Ether, the DAO provides its members with tokens, proportional to their investment, representing voting and ownership rights.⁹⁶ Although a

A DAO is a particular kind of decentralized organization that is neither run nor controlled by anyone but code. As opposed to decentralized organizations—which are operated by individuals who hold the ultimate decision-making power within the governance structure of the organization—DAOs are designed to run autonomously on a blockchain.

Id.

⁹¹ *Id.*

[A] DAO can interact with people, as the “users” of the services provided by the DAO . . . [but a]fter a DAO has been deployed on a blockchain, it neither needs nor necessarily heeds its creators. The DAO acquires a life of its own, and—so long as it can sustain itself by paying for the resources it needs on the blockchain-based network—the DAO will continue to operate independently of the will of its original developers.

Id.

⁹² *Id.* (manuscript at ch. 8, at 3–4). There is a distinction to be made between a decentralized autonomous organization and artificial intelligence. *Id.* Complete autonomous intelligence is found in plain old robots. *Id.*

⁹³ *Id.*

⁹⁴ *Id.* (manuscript at ch. 7, at 11) (“Indeed, the first decentralized organization, *The DAO*, launched in May of 2016. *The DAO* was a decentralized venture capital fund, which acted as a hub for large or small investors seeking to put money into innovative blockchain-based projects.”).

⁹⁵ Nathaniel Popper, *Ethereum, a Virtual Currency, Enables Transactions That Rival Bitcoin’s*, N.Y. TIMES: DEALBOOK (Mar. 27, 2016), <http://www.nytimes.com/2016/03/28/business/dealbook/ethereum-a-virtual-currency-enables-transactions-that-rival-bitcoins.html>. Ether is a virtual currency similar to bitcoin. *Id.* The Ethereum system is built on a blockchain in which every transaction is recorded publicly. *Id.*

⁹⁶ ALLEN & OVERY LLP, *supra* note 3, at 3 (explaining that DAO tokens are freely transferable and their price may fluctuate, much like typical company shares); *see also* DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 10).

At their most basic level, decentralized organizations operate by means of cryptographically secured tokens, which grant people the right to either directly or indirectly control an organization’s assets. These tokens can either be purchased, or allocated as a reward in exchange for people to contribute their own resources to the decentralized organization. Every token can be imbued with specific rights . . . to

decentralized autonomous organization is not completely autonomous, it is closer to artificial intelligence.⁹⁷ In contrast, the DAO does not have the high level of autonomy like that of a typical decentralized autonomous organization.⁹⁸ In other words, the DAO is not smart enough to be a decentralized autonomous organization.⁹⁹

The DAO is an open source software,¹⁰⁰ organized according to the rules set out in its code.¹⁰¹ It is owned by all those who purchased a token and operates by collective voting of these members.¹⁰² Rather than elect a chief executive officer or establish a board of directors, the DAO has set up a system of curators and contractors, which maintains and alters its code.¹⁰³ The DAO's reliance on Ether as its currency allows people to send their money to it from anywhere in the world without providing any identifying information.¹⁰⁴ Those with more tokens¹⁰⁵

access, manage, or transfer the resources or services that an organization controls. Tokens can also be associated with specific privileges

Id.

⁹⁷ See Buterin, *supra* note 70 (explaining that a decentralized autonomous organization requires heavy involvement from humans to operate but has a large degree of autonomous intelligence on its own). A decentralized organization involves humans interacting with each other according to the protocol specified in the code and enforced on the blockchain (like the DAO's structure). *Id.* What makes it decentralized is the lack of typical hierarchical structure managed by humans interacting in person and controlling property via a legal system. *Id.*

⁹⁸ See del Castillo, *supra* note 2. The DAO is different from a traditional company with a formal managerial structure. *Id.* In contrast, the DAO is "a tightly packed collection of smart contracts written on the Ethereum blockchain." *Id.*

⁹⁹ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 8, at 3).

¹⁰⁰ *Id.* (manuscript at ch. 7, at 10). Open source software is software that does not have a defined governance structure, which means that members can modify the software through a consensus. *What Is Open Source?*, OPENSOURCE.COM, <https://opensource.com/resources/what-open-source> (last visited Feb. 18, 2018); see also DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 1).

¹⁰¹ See *id.* at 11 ("Every aspect of *The DAO's* operations—from governance to day-to-day tasks, like receiving proposals and issuing payments—was defined in smart contract code."). Day-to-day tasks include activities such as receiving proposals and issuing payments. *Id.*

¹⁰² del Castillo, *supra* note 2. The digital token for the DAO are Ethers—the digital token of the Ethereum network. *Id.* The DAO disperses Ethers to other startups and projects, and investors in the DAO receive voting rights through digital tokens which they receive in exchange for investment capital. *Id.*

¹⁰³ ALLEN & OVERY LLP, *supra* note 3, at 3. A curator is a participant tasked with maintaining the code and proposing changes. *Id.* A contractor is an actor in the physical world who can make proposals to a DAO to utilize some or all of its funds for the development of a product or service. *Id.*; see also del Castillo, *supra* note 2.

On top of that structure is a group of so-called Curators that can be elected or removed by DAO token holders. The current list of Curators include a number of well-connected Ethereum contributors including inventor Vitalik Buterin. The DAO's objective is to support sharing economy projects delivered by "contractors" by allocating [Ethers] raised during its creation phase.

del Castillo, *supra* note 2; see also DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 11) ("This blockchain-based organization did not elect a chief executive officer or imbue control over the organization to a board of directors.").

¹⁰⁴ Metz, *supra* note 1. Because members are not required to provide any identifying

have more voting rights.¹⁰⁶ Once a project receives a sufficient number of votes under the terms of the contract in the blockchain, the smart contracts underlying the DAO automatically fund the project.¹⁰⁷ In setting up the DAO according to computer code, without formal executives, the collective voting system creates a technology-enabled democratic collective.¹⁰⁸ Despite its initial success however,¹⁰⁹ the DAO does not have a recognized legal status in the United States, leading to confusion about the duties and responsibilities of DAO members.¹¹⁰

D. *Why It Is Necessary to Clarify the Legal Status of the DAO and Other Decentralized Organizations*

While the DAO is the most prominent example of a decentralized organization,¹¹¹ additional decentralized organizations may begin to develop and emerge. The technology at the foundation of decentralized organizations like the DAO is likely to expand and, with time, decrease the cost of new organizations.¹¹² Moreover, as more organizations develop, the diverse array of smart contracts that may emerge could contribute to decreasing both the cost and complexity of creating decentralized organizations.¹¹³ Despite the DAO's rapid growth,¹¹⁴

information, members are able to anonymously invest throughout the globe.

¹⁰⁵ The more Ether an investor purchases, the more tokens they receive. DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 11).

¹⁰⁶ *Id.* (manuscript at ch. 7, at 11) (“[I]t implemented a plutocratic governance model, granting those who invested money in the organization with the right to vote (in proportion to their holdings) on whether or not the organization should fund blockchain-based projects.”).

¹⁰⁷ *Id.*

¹⁰⁸ Popper, *supra* note 95.

¹⁰⁹ See del Castillo, *supra* note 2. By late May 2016, about 10,000 people from across the globe anonymously invested more than \$168 million into the DAO, making it the most successful crowdfunded venture ever. *Id.*

¹¹⁰ Jentsch, *supra* note 23, at 1 (“[T]he legal status of DAOs remains the subject of active and vigorous debate and discussion. . . . Some have said that they are autonomous code and can operate independently of legal systems; others have said that they must be owned or operate[d] by humans or human created entities.”).

¹¹¹ ALLEN & OVERY LLP, *supra* note 3, at 1 (“[T]he DAO . . . is the most prominent example of a DAO. It gained significant media attention after it raised the equivalent of USD168 million from individual investors in its initial creation phase, making it the world’s biggest crowdfunding project date.”).

¹¹² DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7). To create a decentralized organization:

[O]ne only needs to deploy one or more smart contracts on a blockchain and pay the required fees to the network. If the smart contracts underpinning these organizations function like open source libraries—as it is anticipated—the complexity and costs of creating these new kinds of organizations are likely to decrease over time.

Id. (manuscript at ch. 7, at 12).

¹¹³ *Id.* (“As more and more people experiment with decentralized organizations, a variety of specialized (and vetted) smart contracts may emerge that could ultimately make the creation of

however, the legal status of decentralized organizations remains uncertain.¹¹⁵

As new decentralized organizations emerge, it is important to clarify the legal status of these entities for a number of reasons. For one, without legal recognition the investors in these organizations are not protected under limited liability laws.¹¹⁶ Because decentralized organizations do not have a recognized legal status, the limited liability protection afforded to many other organizations¹¹⁷ is not available—leaving individuals subject to personal liability because of their investments.¹¹⁸ Moreover, if courts construe the DAO and similar decentralized organizations as general partnerships, token-holders will also owe each other fiduciary duties as partners that they may not have considered upon investment. The risk of personal legal liability may dissuade potential members from investing in, participating in, or creating decentralized organizations. The combination of reduced transaction costs in addition to the benefits of blockchains and smart

these organizations a routine task.”).

¹¹⁴ See ALLEN & OVERY LLP, *supra* note 3, at 1 (“[A]fter it raised the equivalent of USD168 million from individual investors in its initial creation phase, making it the world’s biggest crowdfunding project date.”). It is also important to note that although the DAO grew rapidly, a security breach quickly brought down the DAO. DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 15).

Several weeks after its launch, hackers were able to drain a significant portion of *The DAO*’s assets (worth over \$55 million at the time of the attack), effectively ending the experiment before it began. Attackers managed to obtain these funds by exploiting a vulnerability in the code, which enabled them to transfer the funds to a third party. Following the attack, the Ethereum network, which was relied upon by *The DAO*, agreed to take steps and modify the underlying protocol of the Ethereum blockchain, so as to recover the funds from the attackers. The funds were returned to individuals who purchased or otherwise acquired tokens in the DAO, marking the end of the first large scale experiment with decentralized organizations.

Id.

¹¹⁵ Jentzsch, *supra* note 23, at 1 (“[T]he legal status of DAOs remains the subject of active and vigorous debate and discussion.”); see also ALLEN & OVERY LLP, *supra* note 3, at 5 (“DAOs are not currently recognized as legal entities, creating uncertainty as to the legal rights attributable to a DAO and who bears the legal responsibilities.”).

¹¹⁶ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 16) (“One important hurdle faced by these organizations is the fact that they are not recognized as legal entities. The personal assets of the members of a decentralized organization are not shielded from the liabilities and responsibilities of such organization.”).

¹¹⁷ See Carter G. Bishop, *Unincorporated Limited Liability Business Organizations: Limited Liability Companies and Partnerships*, 29 SUFFOLK U. L. REV. 985, 996–1004 (1995) (discussing the shield of limited liability for LLCs and LLPs); see also Sela E. Stroud, *Director and Officer Liability to Non-Shareholders*, 64 ALA. L. 316, 317 (2003) (explaining that directors and officers of a corporation are generally protected from individual liability, except under certain circumstances).

¹¹⁸ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 16) (“The personal assets of the members of a decentralized organization are not shielded from the liabilities and responsibilities of such organization.”).

contracts, described earlier,¹¹⁹ could enable decentralized organizations to coordinate activities across the globe.¹²⁰ These benefits, however, mean little without legal recognition. In the United States, courts will likely view decentralized organizations such as the DAO as a “general partnership,” and therefore they will be subject to personal liability in the event of insolvency or tort liability.¹²¹

In addition, classification of an interest as a security is significant in several ways.¹²² If a partnership interest is a security under federal and state securities laws, then the offering of such interest must be registered, or exempt from registration, under federal and/or state securities laws.¹²³ Failure to register could lead to a private remedy of rescission or to an enforcement action by the Securities and Exchange Commission (SEC) of criminal or civil penalties.¹²⁴ A party seeking to sue the partnership may be able to forum shop,¹²⁵ and different statutes of limitation may apply.¹²⁶ Moreover, “the anti-fraud provisions of the Securities Acts apply whether or not the security is exempt from registration.”¹²⁷ It is therefore important to identify what the legal status of decentralized organizations like the DAO is, and whether the interests in the organizations are security interests. This Note proposes that not only is the DAO, and similar decentralized organizations, a general partnership, but that the interests in the DAO are securities.

¹¹⁹ See generally *supra* Sections I.A–B (describing the various benefits of blockchain and smart contract technology, namely, the irrevocable nature of the contracts, that smart contracts prevent disputes and litigation, are potentially less ambiguous, and create transparency in the terms making ill-intentioned activity (e.g., fraud) difficult to accomplish).

¹²⁰ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 11–13) (“With transaction costs related to managing group activity reduced, due to blockchain technology, decentralized organizations could potentially be used to coordinate the activities of hundreds of thousands, if not millions of people.”).

¹²¹ *Id.* (manuscript at ch. 7, at 16) (“For instance, in the U.S. (as well as in many European countries), people organizing themselves through a blockchain with the goal of making a profit will likely be deemed a ‘general partnership’ and consequently lack the ability to shield personal assets if the organization injures a third-party or is unable to pay creditors.”); see also ALLEN & OVERY LLP, *supra* note 3, at 5 (“DAOs are not currently recognized as legal entities, creating uncertainty as to the legal rights attributable to a DAO and who bears the legal responsibilities. It is possible that in the abstract a DAO would fall within the categories of a general partnership or joint venture agreement between the participants.”).

¹²² See George G. Yearsich & Edward A. Frantz, *Securities Law Aspects of Partnerships, LLCs, and LLPs*, AM. L. INST., May 28, 1998, SC76 ALI-ABA 699.

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Id.* Under the Securities Act of 1933, as amended, state and federal courts have concurrent jurisdiction; under the Securities Exchange Act of 1934, as amended, federal courts have exclusive jurisdiction. *Id.*

¹²⁶ *Id.*

¹²⁷ *Id.*

II. ANALYSIS

A. *How U.S. Courts Define a General Partnership*

Under the Uniform Partnership Act (UPA),¹²⁸ a partnership is the association of two or more persons to carry on as co-owners of a business for profit, whether or not the persons intended to form a partnership.¹²⁹ Thus, under the UPA, it is irrelevant whether the parties involved referred to themselves as partners or drafted an agreement acknowledging such a relationship.¹³⁰ Rather, the association of at least two persons to carry on as co-owners of a business for profit may be sufficient.¹³¹ However, a partnership is generally established by execution of some instrument that shows the intention of the parties to create a partnership.¹³²

There are three rules of construction that apply in determining whether a partnership has been formed—(1) that the co-owners share property or ownership; (2) that the co-owners share in gross returns; and (3) and that the courts presume a person who shares in profits to be a partner.¹³³ Generally, a court in a state whose partnership laws are

¹²⁸ Because the Uniform Partnership Act (UPA) has been adopted in every state other than Louisiana, this Note will analyze the construction of general partnerships in the United States under the UPA. *See* UNIF. P'SHIP ACT (amended 2013) (UNIF. LAW COMM'N 1997). The UPA governs general partnerships and also governs limited partnerships except where the limited partnership statute is inconsistent. Because the Revised Partnership Act has not had the same success in uniform adoption, the “default rules” set out under the Revised Act will largely be unaddressed. *See id.*

¹²⁹ UNIF. P'SHIP ACT § 202(a); *see, e.g.*, *Hillman v. Cannon*, No. 11–0367, 2011 WL 6670657, at *3 (Iowa Ct. App. Dec. 21, 2011) (“Indeed, they may inadvertently create a partnership despite their expressed subjective intention not to do so. . . . [A]n intent to associate is the crucial test of partnership. . . . A showing of an intent to associate is not at odds with the language . . . which recognizes that a partnership may be formed inadvertently. The focus is not on whether individuals subjectively intended to form a partnership, but on whether the individuals intended to jointly carry on a business for profit.” (internal quotation marks omitted) (internal citations omitted)).

¹³⁰ *Hillman*, 2011 WL 6670657, at *3; *see also* UNIF. P'SHIP ACT § 202(a).

¹³¹ UNIF. P'SHIP ACT § 202(a); *see also Hillman*, 2011 WL 6670657, at *3. A specific agreement between the parties is not necessary in order to form a partnership, but if the parties' voluntary actions form a relationship in which they carry on as co-owners of a business for profit, then they may create a partnership even if there is an expressed intention not to do so. *Id.*

¹³² *Curley Elec., Inc. v. Bills*, 121 P.3d 106, 108–09 (Wash. Ct. App. 2005).

¹³³ *DeFelice v. State*, 351 P.3d 197, 207 (Wash. Ct. App. 2015) (Siddoway, C.J. dissenting); *see also* UNIF. P'SHIP ACT § 202(c).

In determining whether a partnership is formed, the following rules apply: (1) . . . joint property, common property, or part ownership does not by itself establish a partnership, even if the coowners share profits made by use of the property. (2) The sharing of gross returns does not by itself establish a partnership, even if the persons sharing them have a joint or common right or interest in property from which the returns are derived. (3) A person who receives a share of the profits

modeled under the UPA will find that a partnership exists where persons place their money into a business and share in the profits and losses.¹³⁴ The court will also determine the existence of a partnership where the facts objectively show that the parties intended to do acts that would constitute a partnership.¹³⁵ If the conduct of the parties and the circumstances surrounding the transactions evidence the requisite intent to associate, then the court will find a partnership exists.¹³⁶

While a sharing of profits and losses of a business will not alone constitute a partnership, the court will find a partnership exists if the parties carry on a business for their common benefit, contribute property or services to the business, and where each has an interest in the profits.¹³⁷ Moreover, co-ownership does not refer necessarily to property, but to the co-ownership of the business intended to garner profits.¹³⁸ The court will look to the sharing of benefits, risk, and management of the enterprise among the co-owners to determine whether a partnership exists.¹³⁹ Joint control and sharing of profits will

of a business is presumed to be a partner in the business

UNIF. P'SHIP ACT § 202(c).

¹³⁴ *Brown v. 1401 New York Ave., Inc.*, 25 A.3d 912, 913 (D.C. 2011) (“In general, a partnership is formed when two or more competent persons [contract] to place their money, effects, labor, and skill or some or all of them, in lawful commerce or business, and to divide profit and bear the loss in certain proportions” (internal quotation marks omitted) (quoting *Beckman v. Farmer*, 579 A.2d 618, 627 (D.C. 1990))).

¹³⁵ *Id.* (“While the manner in which the parties themselves characterize the relationship is probative of whether their relationship is a partnership, the question ultimately is [an] objective one: whether the parties intended to do the acts that in law constitute partnership.” (internal quotation marks omitted)).

¹³⁶ *See, e.g., Hillman*, 2011 WL 6670657, at *3.

¹³⁷ *De Souza v. Tradelink, L.L.C.*, 2014 IL App (1st) 131456-U, ¶ 21–22 (explaining that the sharing of gross profits will not alone establish a partnership, even if the parties involved have a joint or common interest in the property); *id.* ¶ 21 (“A partnership exists if the parties join together to carry on a business or venture for their common benefit, each party contributes property or services to the venture, and each has a community interest in the profits of the venture.”); *see also* *Olson v. Olson*, 213 N.E.2d 95, 98 (Ill. App. Ct. 1965) (noting that other relevant factors include: the manner in which partners deal with one another and the mode in which each partner has dealt with other persons in a partnership capacity).

¹³⁸ *In re Keytronics*, 744 N.W.2d 425, 441–44 (Neb. 2008) (“Being ‘co-owners’ of a business for profit does not refer to the co-ownership of property, but to the co-ownership of the business intended to garner profits. It is co-ownership that distinguishes partnerships from other commercial relationships such as creditor and debtor”).

¹³⁹ *Id.* at 441.

Co-ownership generally addresses whether the parties share the benefits, risks, and management of the enterprise such that (1) they subjectively view themselves as members of the business rather than as outsiders contracting with it and (2) they are in a better position than others dealing with the firm to monitor and obtain information about the business. The objective indicia of co-ownership are commonly considered to be: (1) profit sharing, (2) control sharing, (3) loss sharing, (4) contribution, and (5) co-ownership of property. . . . [T]hey are not all necessary to establish a partnership relationship, and no single indicium of co-ownership is either necessary or sufficient to prove co-ownership.

usually evidence co-ownership of a business, but the most important factor in determining whether a partnership exists is the intention of the parties.¹⁴⁰

B. *How U.S. Courts Define a Security*

Federal securities regulation began with the Securities Act of 1933, followed by the Securities Exchange Act of 1934.¹⁴¹ The purpose of the Securities Act of 1933 and the Securities Exchange Act of 1934 is to protect investors from fraud.¹⁴² Both Acts only regulate securities and those who work with them.¹⁴³ Under the Securities Exchange Act of 1934,¹⁴⁴ a security is “any note, stock . . . [or] investment contract”¹⁴⁵ In determining whether a particular interest is a security, courts will liberally construe its statutory definition.¹⁴⁶

Id.; see also *Ziegler v. Dahl*, 691 N.W.2d 271, 277 (N.D. 2005) (“Control is an indispensable component of the co-ownership analysis. If partners are co-owners of a business, they each have the power of ultimate control. An important qualification to that rule, however, is that a person does not need to control the business but only needs to have the right to exercise control in the management of the business.” (internal citation omitted)).

¹⁴⁰ UNIF. P'SHIP ACT (amended 2013) (UNIF. LAW COMM'N 1997) § 202 cmt. a (“[M]ere passive-co-ownership of property, as distinguished from using the property to carry on a business, does not establish a partnership . . . and merely sharing gross revenues is likewise insufficient What matters is the intent . . . to establish the business relationship that the law labels a ‘partnership.’”); see *Casino Res. Corp. v. Harrah's Entm't, Inc.*, No. 98-2058ADM/AJB, 2002 WL 480968, at *6 (D. Minn. Mar. 22, 2002) (explaining that co-ownership of a business is usually shown by joint control and sharing in losses and profits, although the proportion of sharing losses and profits need not be equal to establish a partnership); *Bernstein, Bernstein, Wile & Gordon v. Ross*, 177 N.W.2d 193, 195 (Mich. Ct. App. 1970) (explaining that the intention of the parties is of “prime importance”); see also *Ziegler v. Dahl*, 691 N.W.2d at 275 (“One of the most important tests of whether a partnership exists between two persons is the intent of the parties. . . . [T]he focus is not on whether individuals subjectively intended to form a partnership, but on whether the individuals intended to jointly carry on a business for profit.”).

¹⁴¹ 15 U.S.C. §§ 77a-77aa, 78a (2012).

¹⁴² See *United Hous. Found. v. Forman*, 421 U.S. 837, 849 (1975) (noting that purpose of Securities Acts is to prevent fraud).

¹⁴³ See 15 U.S.C. § 77b (defining the various persons subject to securities regulation).

¹⁴⁴ Also commonly referred to as: the '34 Act, the 1934 Act, the 1934 Securities Exchange Act, the Exchange Act, and the Securities Exchange Act. 15 U.S.C. §§ 78a-78dd.

¹⁴⁵ 15 U.S.C. § 78c(10) (“The term ‘security’ means any note, stock, treasury stock, security future, . . . certificate of interest or participation in any profit-sharing agreement, . . . transferable share, investment contract, . . . or in general, any instrument commonly known as a ‘security’ . . .”).

¹⁴⁶ *SEC v. W.J. Howey Co.*, 328 U.S. 293, 299 (1946). In *Howey*, the Supreme Court looked to legislative intent behind the definition of a security. *Id.*

It 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.” It embodies a flexible rather than a static principle . . . capable of adaptation to meet the countless and variable schemes

The Court's first attempt to define an investment contract was in the seminal case, *SEC v. W.J. Howey, Co.*¹⁴⁷ In *Howey*, the SEC claimed two Florida corporations violated the Securities Act of 1933 in offering units of a citrus grove development together with a contract for cultivating, marketing, and distributing profits to the investor.¹⁴⁸ The Howey Company owned large tracts of citrus groves and planted about 500 acres each year, keeping half for the company and holding the other half out to the public for additional financing.¹⁴⁹ The Howey-in-the-Hills Service, Inc. (the second of the two Florida corporations) cultivated and developed the groves and harvested and marketed the crops.¹⁵⁰ The Howey Company offered both a land sales contract and a service contract to customers, who could not invest in the grove unless service arrangements were made.¹⁵¹ The service contract included a leasehold interest giving Howey-in-the-Hills full possession of the land and authority over the cultivation of the groves.¹⁵² The purchasers of the land sales contracts and service contracts generally lacked the knowledge, skill, and equipment necessary for citrus tree cultivation.¹⁵³ The purchasers were attracted to the grove by the expectation of substantial profits.¹⁵⁴ Under these facts, the Supreme Court held that the purchasers' interests in the grove were investment contracts and therefore securities subject to regulation.¹⁵⁵

An investment contract, according to the *Howey* Court, is a contract "whereby a person invests his money in a common enterprise and is led to expect profits solely from the efforts of... a third party..."¹⁵⁶ The Court established a four-part test to determine whether the purchase of land and service contracts from the Howey

Id. (citations omitted); see also Marc Alcer, Comment, *The Howey Test: A Common Ground for the Common Enterprise Theory*, 29 U.C. DAVIS L. REV. 1217, 1220-24 (1996) (noting that the discretion courts have available to liberally construe a security is through the inclusion of the term "investment contract").

¹⁴⁷ *Howey*, 328 U.S. at 299.

¹⁴⁸ *Id.* at 294-95.

¹⁴⁹ *Id.* at 295.

¹⁵⁰ *Id.*

¹⁵¹ *Id.* The purchaser did not have to make arrangements with Howey-in-the-Hills Service, Inc. in order to invest in the grove, but the Howey Company stressed the superiority of Howey-in-the-Hills. *Id.*

¹⁵² *Id.* The service contract usually lasted for ten years without an option of cancellation. *Id.* at 296. Howey-in-the-Hills received a leasehold interest and "full and complete" possession of the acreage. *Id.* At a specified fee (plus cost of labor and materials), Howey-in-the-Hills was given full discretion and authority over cultivation, harvesting, and marketing. *Id.* Without consent of the company, the purchaser had no right to market the crop or to specific fruit. *Id.*

¹⁵³ *Id.* The purchasers were also primarily non-residents of Florida and were mainly professionals. *Id.*

¹⁵⁴ *Id.* The Howey Company reported profits amounting to twenty percent between 1943 and 1944, with a larger return the following year. *Id.*

¹⁵⁵ *Id.* at 299-300.

¹⁵⁶ *Id.* at 298-99.

Corporation and Howey-in-the-Hills is an investment contract. The Court determined that an investment contract exists where there is an investment of money or capital,¹⁵⁷ an expectation of profits,¹⁵⁸ the investment of money is in a common enterprise,¹⁵⁹ and any profit comes from the efforts of a promoter or third party.¹⁶⁰ In *Howey*, the purchasers were offered an opportunity to contribute money and share in the profits of the grove that was managed and partly owned by the corporations.¹⁶¹ The purchasers had neither the skills, knowledge, or equipment to cultivate, harvest, and market the products, and so they required a promoter or third party (Howey-in-the-Hills).¹⁶² Moreover, that the purchasers lacked the expertise and equipment is evidence that they did not intend to occupy the land or develop it but rather were attracted solely by a potential return on their investment.¹⁶³ Under *Howey*, whether the enterprise is speculative, evidenced by formal certificates or nominal interests, or whether the property lacks intrinsic value is immaterial.¹⁶⁴ Thus, if an investment does not qualify as one of the many other securities defined by the Securities Exchange Act of 1934,¹⁶⁵ then it is still possible that the contribution of funds or capital will qualify as an investment contract for purposes of the statute.¹⁶⁶

III. PROPOSAL

A. *The DAO Is a General Partnership*

Applying the general rules of construction of a general partnership,¹⁶⁷ the DAO and other decentralized organizations are likely general partnerships in the United States.¹⁶⁸ Under the UPA, a venture

¹⁵⁷ *Id.* at 300.

¹⁵⁸ *Id.* at 299–300.

¹⁵⁹ *Id.*

¹⁶⁰ *Id.* (noting that “the promoters manage, control and operate the enterprise”).

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ *Id.* at 300.

¹⁶⁴ *Id.* at 299–301.

¹⁶⁵ 15 U.S.C. § 78c(10) (2012).

¹⁶⁶ See generally *Howey*, 328 U.S. 293.

¹⁶⁷ See generally *supra* Section II.A (explaining the rules of formation of a partnership).

¹⁶⁸ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 16).

For instance, in the U.S. (as well as many European countries), people organizing themselves through a blockchain with the goal of making a profit will likely be deemed a “general partnership” and consequently lack the ability to shield personal assets if the organization injures a third-party or is unable to pay creditors.

Id.; see also ALLEN & OVERY LLP, *supra* note 3, at 5 (“It is possible that in the abstract a DAO would fall within the categories of a general partnership or joint venture agreement between the participants.”).

or organization is a partnership where the association of at least two people carry on as co-owners of a business for profit.¹⁶⁹ The DAO easily satisfies that requirement. By late May 2016, approximately 10,000 people across the globe invested millions of dollars into the DAO.¹⁷⁰

The investors also displayed an intention to carry on as co-owners of a business for profit.¹⁷¹ Through their purchase of tokens, members of the DAO become investors in various crowdfunding projects.¹⁷² Each token represents an interest in the investment or project and gives each investor the right to control a portion of the DAO's assets.¹⁷³ Investors purchase tokens in the DAO,¹⁷⁴ and the DAO subsequently transfers these tokens to other projects and startups.¹⁷⁵ While the startups get these investments from the DAO, the investors receive the right to vote on whether the DAO should fund certain projects.¹⁷⁶ The DAO's purpose as a venture capital firm is to allow for anonymous global investment from anywhere in the world.¹⁷⁷ The rights and interests the token-holders in the DAO receive are evidence of their intent to carry on a business for profit.¹⁷⁸ However, a sharing of profits and losses in a business does not alone constitute a partnership.¹⁷⁹

In determining whether the DAO is a general partnership one must consider: (1) whether the co-owners share property or ownership; (2) if

¹⁶⁹ UNIF. P'SHIP ACT (amended 2013) (UNIF. LAW COMM'N 1997) § 202(a) (“[T]he association of two or more persons to carry on as co-owners of a business for profit forms a partnership, whether or not the persons intended to form a partnership.”).

¹⁷⁰ Metz, *supra* note 1.

¹⁷¹ As required by the UNIF. P'SHIP ACT § 202(a).

¹⁷² See DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 11) (“Indeed, the first decentralized organization, *The DAO*, launched in May of 2016. *The DAO* was a decentralized venture capital fund, which acted as a hub for large or small investors seeking to put money into innovative blockchain-based projects.”).

¹⁷³ *Id.* (manuscript at ch. 7, at 10).

[D]ecentralized organizations operate by means of cryptographically secured tokens, which grant people the right to either directly or indirectly control an organization's assets. These tokens can either be purchased, or allocated as a reward in exchange for people to contribute their own resources to the decentralized organization. Every token can be imbued with specific rights . . . to access, manage, or transfer the resources or services that an organization controls.

Id.

¹⁷⁴ The digital token for the DAO are Ethers. See del Castillo, *supra* note 2.

¹⁷⁵ *Id.*

¹⁷⁶ *Id.* The DAO disperses Ethers to other startups, and investors receive voting rights through Ether in exchange for investment capital. *Id.*; see also DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 11) (explaining that investors in the DAO receive “the right to vote (in proportion to their holdings) on whether or not the organization should fund” various projects).

¹⁷⁷ Popper, *supra* note 95.

¹⁷⁸ As required by the UNIF. P'SHIP ACT (amended 2013) (UNIF. LAW COMM'N 1997) § 202(a).

¹⁷⁹ *De Souza v. Tradelink, L.L.C.*, 2014 IL App (1st) 131456-U, ¶ 21 (explaining that the sharing of gross profits will not alone establish a partnership).

the co-owners share in gross returns; and (3) that there is a presumption that a person who shares in the profits is a partner in the enterprise.¹⁸⁰ To the first rule of construction, each investor in the DAO receives a token representing their investment and a right to vote on crowdfunding projects.¹⁸¹ When analyzing whether co-owners share ownership of the business, one must look to each partner's ability to control the enterprise.¹⁸²

In states that have adopted the UPA, the power of control is critical in establishing a general partnership.¹⁸³ However, that power of control does not mean that each partner must have the right to control the business, but only the right to exercise control in the management of the business.¹⁸⁴ The rules of the DAO are set out in its code, and it operates through collective voting without the need for human executives.¹⁸⁵ The DAO's use of smart contracts and blockchain technology create a leaderless collective under which every member has the right to exercise control in the management of the business.¹⁸⁶ Each token gives members the right to vote on potential crowdfunding projects, to alter the code of the smart contract encrypted in the blockchain, and to elect or remove curators.¹⁸⁷ Without the typical hierarchical structure, each

¹⁸⁰ UNIF. P'SHIP ACT § 202(c).

In determining whether a partnership is formed, the following rules apply: (1) . . . joint property, common property, or part ownership does not by itself establish a partnership, even if the co-owners share profits made by use of the property. (2) The sharing of gross returns does not by itself establish a partnership, even if the persons sharing them have a joint or common right or interest in property from which the returns are derived. (3) A person who receives a share of the profits of a business is presumed to be a partner in the business”

Id. These are the three rules of construction under the UPA to determine whether an entity is a partnership.

¹⁸¹ del Castillo, *supra* note 2.

¹⁸² *Ziegler v. Dahl*, 691 N.W.2d 271, 277 (N.D. 2005). The court explained that the right to control the business is an indispensable component of the co-ownership. *Id.* The court stated that “if partners are co-owners of a business, they each have the power of ultimate control.” *Id.*

¹⁸³ *See id.*

¹⁸⁴ *Id.* (“An important qualification to that rule, however, is that a person does not need to control the business, but only needs to have the right to exercise control in the management of the business.”); *see also In re KeyTronics*, 744 N.W.2d 425, 441–43 (Neb. 2008). In *In re Keytronics*, the court held that there are five indicia of co-ownership: (1) profit sharing, (2) control sharing, (3) loss sharing, (4) contribution, and (5) co-ownership of property.) *Id.* The court noted that not all five of these indicia must be met, but one alone would not establish a general partnership either. *Id.*

¹⁸⁵ *See Popper*, *supra* note 95.

¹⁸⁶ Once a project receives a sufficient number of votes under the terms of the contract in the blockchain, the smart contracts underlying the DAO automatically fund the project. DE FILIPPI & WRIGHT, *supra* 43 (manuscript at ch. 7, at 11). Those with more tokens receive more voting rights. *Id.*

¹⁸⁷ *See id.* (explaining that every member has the right to vote in proportion to their holdings on whether or not to fund a project); *see also ALLEN & OVERY LLP*, *supra* note 3, at 3 (explaining that a curator is a member tasked with maintaining the code in the smart contract and proposing changes for the members to vote on); del Castillo, *supra* note 2 (noting that

member has the power to exercise control over the business, including the control over day-to-day tasks and management.¹⁸⁸

To the second rule of construction, each token-holding member has a right to share in the profits and losses of the partnership, and each has a common right or joint interest in the business entity.¹⁸⁹ The tokens provide DAO investors with ownership and voting rights in the DAO, which in turn invests in companies and projects, with the goal of providing a positive return to its members.¹⁹⁰ In purchasing tokens, each member joins a collective venture capital firm seeking to crowdfund startups and other projects with the goal of sharing in the gross profits of the ventures.¹⁹¹ However, as an investment, each partner also assumes the risk of an unsuccessful investment, or the risk that a project they supported would not receive enough votes from other token holders.¹⁹² Thus, through the DAO's tokens, each investor acquires a common right in the business ownership along with the right to share in both the profits and losses of the venture.

Under the third rule of construction of the UPA, there is a

curators can be elected or removed by DAO token holders and also explaining that as open source software, the DAO blockchain is capable of modification through member consensus).

¹⁸⁸ See DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 4–7). The DAO's reliance on blockchain technology for every aspect of the DAO's operations, including day-to-day tasks, allows for a leaderless collective under which smart contracts self-execute these operations based on its code. *Id.* Because each member has the right to access, manage, and vote on proposals or changes to the smart code, each member also has the ability to exercise indirect control over nearly every aspect of the DAO. *Id.*

¹⁸⁹ UNIF. P'SHIP ACT (amended 2013) (UNIF. LAW COMM'N 1997) § 202(c) (“(2) The sharing of gross returns does not by itself establish a partnership, even if the persons sharing them have a joint or common right or interest in property from which the returns are derived.”); see also *Brown v. 1401 New York Ave., Inc.*, 25 A.3d 912, 913 (D.C. 2011) (noting that the right to share profits and losses can be proportional); *Casino Res. Corp. v. Harrah's Entm't, Inc.*, No. 98–2058ADM/AJB, 2002 WL 480968, at *6 (D. Minn. Mar. 22, 2002) (noting that the proportion of sharing losses and profits need not be equal to establish a partnership); *Maloney v. Pihera*, 573 N.E.2d 1379, 1387 (Ill. App. Ct. 1991) (noting that a partnership exists if the parties join together to carry on a venture for their common benefit, each party contributes to the venture, and each party has a common interest in the profits). *But see De Souza v. Tradelink, L.L.C.*, 2014 IL App (1st) 131456-U, ¶ 21 (reiterating the rule that the sharing of gross profits will not alone establish a partnership).

¹⁹⁰ ALLEN & OVERY LLP, *supra* note 3, at 3–4.

The DAO was a for-profit entity which took in funds from investors (in the form of Ether) in exchange for divisible and freely transferable tokens allocating ownership and voting rights. . . . The DAO existed to invest in companies, projects and ideas, with the aim of providing a positive return (in the form of dividends or other benefits) to its participants.

Id.

¹⁹¹ *Id.*

¹⁹² See DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 10–12) (explaining that every member has the right to vote in proportion to their holdings on whether or not to fund a project). Once a project receives a sufficient number of votes under the terms of the contract in the blockchain, the smart contracts underlying the DAO automatically fund the project. *Id.* Those with more tokens receive more voting rights. *Id.*

presumption that a party who shares in the gross returns of a venture is a partner, although this is not dispositive.¹⁹³ But because the members share in the profits, losses, contribution, control, and co-ownership of the property, the presumption is persuasive.¹⁹⁴ Although the three rules of construction under the UPA¹⁹⁵ are important, one of the most important tests in determining whether a partnership exists is the intent of the parties to jointly carry on a business for profit.¹⁹⁶ This does not mean that the parties had to intend to create a partnership, but instead only requires that the parties objectively intended to jointly carry on a business for profit.¹⁹⁷ Although a partnership is usually established by the execution of an instrument showing the intention of the parties to create a partnership,¹⁹⁸ a specific agreement to do so is not necessary.¹⁹⁹

In the case of the DAO, the conduct surrounding each investor's actions shows an intention to carry on a business for profit as co-owners with other investors. When each investor purchased their tokens, they knew that the tokens allocated ownership and voting rights and that

¹⁹³ UNIF. P'SHIP ACT § 202(c) ("In determining whether a partnership is formed, the following rules apply . . . (3) A person who receives a share of the profits of a business is presumed to be a partner in the business . . .").

¹⁹⁴ See *In re Keytronics*, 744 N.W.2d 425, 441 (Neb. 2008) (explaining the five indicia of co-ownership: "(1) profit sharing, (2) control sharing, (3) loss sharing, (4) contribution, and (5) co-ownership of property").

¹⁹⁵ See UNIF. P'SHIP ACT § 202(c).

¹⁹⁶ UNIF. P'SHIP ACT § 202 cmt. a.

[M]ere passive co-ownership of property, as distinguished from using the property to carry on a business, does not establish a partnership . . . [and] merely sharing gross revenues is likewise insufficient . . . What matters is the intent . . . to establish the business relationship that the law labels a "partnership."

Id.; *Ziegler v. Dahl*, 691 N.W.2d 271, 275 (N.D. 2005) ("One of the most important tests of whether a partnership exists between two persons is the intent of the parties. . . [T]he focus is not on whether individuals subjectively intended to form a partnership, but on whether the individuals intended to jointly carry on a business for profit."); see also *Bernstein, Bernstein, Wile & Gordon v. Ross*, 177 N.W.2d 193, 195 (Mich. Ct. App. 1970) (noting that "the intention of the parties is of prime importance").

¹⁹⁷ Under the UPA, two or more persons may inadvertently create a partnership. See UNIF. P'SHIP ACT § 202(a); see also *Hillman v. Cannon*, No. 11-0367, 2011 WL 6670657, at *3 (Iowa Ct. App. Dec. 21, 2011).

Indeed, they may inadvertently create a partnership despite their expressed subjective intention not to do so. . . [A]n intent to associate is the crucial test of partnership. . . A showing of an intent to associate is not at odds with the language . . . which recognizes that a partnership may be formed inadvertently. The focus is not on whether individuals subjectively intended to form a partnership, but on whether the individuals intended to jointly carry on a business for profit.

Hillman, 2011 WL 6670657, at *3 (internal citations omitted) (internal quotation marks omitted).

¹⁹⁸ *Curley Elec., Inc. v. Bills*, 121 P.3d 106, 108-09 (Wash. Ct. App. 2005).

¹⁹⁹ *Hillman*, 2011 WL 6670657, at *3 (noting that there is no requirement that the parties have a specific agreement in order to form a partnership). The parties' actions showing an intent to carry on as co-owners of a business for profit will create a partnership even if there is an expressed subjective intention not to do so. *Id.*

each person who purchased tokens would receive those rights in proportion to their holdings.²⁰⁰ Moreover, because the entire contract with the rules and construction of the DAO were accessible to all token holders through the smart contract in the blockchain, all members knew they shared a common interest with other members and that each had the ability to manage the code.²⁰¹ Thus, this is not even the case where there is no specific agreement showing an intent to establish a partnership relationship, but rather it is also the subjective intent of the parties to form such a relationship.²⁰² Although there is sufficient evidence to determine that the DAO is a general partnership under the UPA, even if a court were to find to the contrary, the DAO is nevertheless a joint venture.

B. *Even If the DAO Is Not a General Partnership, It Is
Nevertheless a Joint Venture*

A court should find that the DAO creates a general partnership for its investors,²⁰³ but even if a court does not find that a partnership exists, it is nevertheless a joint venture.²⁰⁴ Unlike general partnerships, joint ventures are formed for a limited purpose.²⁰⁵ However, unlike the almost uniform adoption among the states of the UPA, not all states distinguish between a joint venture and a partnership.²⁰⁶ Many states have different definitions for a joint venture and general partnership but treat them the same under the law.²⁰⁷ Often, courts treat joint ventures

²⁰⁰ ALLEN & OVERY LLP, *supra* note 3, at 2–4; *see also* DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 11) (explaining that every member has the right to vote in proportion to their holdings on whether or not to fund a project).

²⁰¹ *See* DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 10–12). Once a project receives a sufficient number of votes under the terms of the contract in the blockchain, the smart contracts underlying the DAO automatically fund the project. *Id.* Those with more tokens receive more voting rights and grant people the right to either directly or indirectly control an organization's assets. *Id.* These tokens can either be purchased or allocated as a reward in exchange for people's contributions of their own resources to the decentralized organization. *Id.*

²⁰² Unlike the scenario in *Hillman*, in this circumstance there is a subjective intent to carry on as co-owners of a business for profit.

²⁰³ *See supra* Section I.C.

²⁰⁴ *See* ALLEN & OVERY LLP, *supra* note 3, at 5 (“It is possible that in the abstract a DAO would fall within the categories of a general partnership or joint venture agreement between the participants.”).

²⁰⁵ *Inv. Assocs. v. Summit Assocs., Inc.*, 74 A.3d 1192, 1207 (Conn. 2013). General partnerships are formed as an ongoing enterprise, whereas joint ventures are formed for a limited purpose. *Id.* A partnership is formed to carry on the general business of one sort or another, and a joint venture is limited to a single transaction or course of transactions. *Id.*

²⁰⁶ *See* Roumen Manolov, *General Partnership Participation Interests as Securities*, 69 J. MO. B. 144, 144 n.4 (2013). It is important to note that not all lawyers distinguish a partnership from a joint venture. *Id.* at 144.

²⁰⁷ *See* UNIF. P'SHIP ACT (amended 2013) (UNIF. LAW COMM'N 1997) § 101 (“The UPA

as pseudopartnerships according to partnership principles.²⁰⁸

Although the distinction between a joint venture and a partnership is not clear, a joint venture and a partnership differ in a few respects.²⁰⁹ A joint venture has the elements of a partnership²¹⁰ but exists for a limited period of time and purpose.²¹¹ Many courts have held that the major distinction between a joint venture and a partnership is that a joint venture relates to a single transaction or enterprise and a partnership relates to a continuing business relationship.²¹²

Although a court generally decides the issue of whether a joint venture exists on a case-by-case basis, there are certain factors that must be present in order to find that a joint venture exists.²¹³ A joint venture exists where two or more persons combine their money, property, or time in the course of some particular business deal, agreeing to share in the profits and losses.²¹⁴ Facts showing a pooling of funds or labor with a

governs general partnerships, and also governs limited partnerships except where the limited partnership statute is inconsistent.”); *see also* ALAN S. GUTTERMAN, CALIFORNIA TRANSACTIONS FORMS—BUSINESS ENTITIES § 20:4 (Sept. 2017) (“A joint venture is merely a general partnership that has been formed for a specific transaction or series of transactions, and does not involve a continuing business relationship between the partners. In all other respects, the law treats a joint venture as a general partnership.” (citing *Bank of California v. Connolly*, 36 Cal. App. 3d 350 (Cal. App. 1973)). *But see* GUTTERMAN, *supra*, § 40; *Boice v. Jones*, 106 A.D. 547, 549 (1st Dept. 1905) (explaining that there is a difference between a claim on the existence of a general partnership and a claim under joint venture theory). In New Jersey, joint ventures are treated as partnerships. *See Paniagua Grp., Inc. v. Hosp. Specialists, L.L.C.*, 183 F.Supp.3d 591 (D.N.J. 2016). In Louisiana, joint ventures are treated as partnerships as well. *See Meladine v. Stone Energy*, 196 So.3d 742 (La. Ct. App. 2016). But in Massachusetts, a joint venture is slightly different from a general partnership. *See Sun Capital Partners III, LP v. New England Teamsters & Trucking Indus. Pension Fund*, 172 F.Supp.3d 447 (D. Mass. 2016).

²⁰⁸ Adam B. Weissburg, Note, *Reviewing the Law on Joint Ventures with an Eye Toward the Future*, 63 S. CAL. L. REV. 487, 488–89 (1990) (“[T]he American legal system treats joint ventures as pseudopartnerships” and applies partnership principles in conflicts in joint ventures).

²⁰⁹ *King v. Modern Music Co.*, 33 P.3d 947, 955, 956 (Okla. Civ. App. 2001). A joint venture is generally a relationship similar but not identical to a partnership. *Id.*

²¹⁰ *Nat’l Bank of Commerce (of El Dorado) v. HCA Health Servs. of Midwest, Inc.*, 800 S.W.2d 694, 697 (Ark. 1990).

²¹¹ *Messer Griesheim Indus., Inc. v. Cryotech of Kingsport, Inc.*, 131 S.W.3d 457, 469 (Tenn. Ct. App. 2003) (“Although similar to a partnership, a joint venture exists for a more limited time and for a more limited purpose.”).

²¹² *Wilger Enters., Inc. v. Broadway Vista Partners*, 115 P.3d 822, 824 (N.M. Ct. App. 2005); *Byrd v. E.B.B. Farms*, 796 N.E.2d 747, 753–54 (Ind. Ct. App. 2003); *Chambers v. Kay*, 56 P.3d 645, 651 (Cal. 2002); *Nat’l Sch. Bus. Serv., Inc. v. Comm’r of Dept. of Emp’t & Training*, 730 N.E.2d 342, 348 n.13 (Mass. App. Ct. 2000).

²¹³ *J. Leo Johnson, Inc. v. Carmer*, 156 A.2d 499, 502 (Del. 1959) (“Generally, courts have not laid down any very certain definition of what constitutes a joint adventure, nor have they established a very fixed or certain boundary thereof, contenting themselves in determining whether the facts of a particular case constitute the relationship of joint adventure.”).

²¹⁴ *Eagle-Picher Co. v. Mid-Continent Lead & Zinc Co.*, 209 F.2d 917, 919 (10th Cir. 1954).

To constitute a joint adventure there must be a combination of two or more persons devoted to a specific enterprise. They must agree to combine their property, efforts, skill and knowledge in a common undertaking. There must be an agreement for joint property interests in the undertaking and a sharing of the profits or losses.

common purpose to attain a result for the benefit of all the parties, where each participant has a right in some measure to direct conduct, will tend to show a joint venture exists.²¹⁵ Assuming the circumstances do not establish a partnership, the relation of joint venturers depends on their intent to associate themselves as such.²¹⁶ Like partnerships,²¹⁷ a formal or specific agreement creating a joint venture is not necessary.²¹⁸ Generally, a joint venture will continue until the project is completed or the parties no longer view the relationship as practicable.²¹⁹

Under the structure of the DAO, investors purchased Ether to gain rights in a venture capital firm whereby they collectively decided on which crowdfunded ventures to support.²²⁰ Although the circumstances show that the investors in the DAO are likely partners,²²¹ they are certainly joint venturers. Many states have established sets of criteria tending to show the existence of a joint venture.²²² Because the Delaware Chancery Court²²³ is highly regarded in this area of law, an explanation of these criteria under Delaware law is an appropriate example.

Under Delaware law, five elements must be present to adequately establish a joint venture.²²⁴ First, there must be a community of interest in the performance of a common purpose.²²⁵ There must also be joint control or at least the right to control the enterprise.²²⁶ A joint proprietary interest²²⁷ in the subject matter of the enterprise is also

Id.

²¹⁵ *Id.*

²¹⁶ *Simpson v. Richmond Worsted Spinning Co.*, 145 A. 250 (Me. 1929).

²¹⁷ See discussion *supra* Section II.A (explaining the existence of a partnership).

²¹⁸ *In re PCH Assocs.*, 949 F.2d 585, 598 (2d Cir. 1991).

²¹⁹ *Inv. Assocs. v. Summit Assocs., Inc.*, 74 A.3d 1192, 1207 (Conn. 2013). The existence of a joint venture may also be created by a parol agreement or inferred from the conduct of the parties and surrounding facts and circumstances. *Id.*

²²⁰ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch.7).

²²¹ See discussion *supra* Part II (analyzing the legal status of the DAO as a general partnership).

²²² For example, in Florida a plaintiff must prove five elements. See *generally* *Mumford v. Carnival Corp.*, 7 F.Supp.3d 1243 (S.D. Fla. 2014); see also *Bluesky Greenland Envtl. Sols., L.L.C. v. 21st Century Planet Fund, L.L.C.*, 985 F.Supp.2d 1356 (S.D. Fla. 2013). In Ohio, the court looks to four elements of a joint venture. See *Milestone Shipping, S.A. v. Estech Trading L.L.C.*, 811 F.Supp.2d 915 (S.D.N.Y. 2011) (applying Ohio Law). Under New York law, five elements must be met to adequately allege a joint venture. See *TPTCC NY, Inc. v. Radiation Therapy Servs., Inc.*, 784 F.Supp.2d 485 (S.D.N.Y. 2011); *Int'l Equity Invs., Inc. v. Opportunity Equity Partners Ltd.*, 472 F.Supp.2d 544 (S.D.N.Y. 2007).

²²³ The Delaware Chancery Court is a specialized trial court that is highly regarded for its business decisions and analysis. Joseph Callanan, *Managers of Delaware LLCs Owe Fiduciary Duty Except by Agreement*, LITIG. NEWS (Apr. 17, 2012), <http://apps.americanbar.org/litigation/litigationnews/mobile/article-fiduciary-duty-delaware.html>.

²²⁴ See *Wah Chang Smelting & Ref. Co. of Am., Inc. v. Cleveland Tungsten Inc.*, No. 1324-K, 1996 WL 487941, at *4 (Del. Ch. Aug. 19, 1996); see also *Warren v. Goldinger Bros., Inc.*, 414 A.2d 507, 508–09 (Del. 1980).

²²⁵ *Warren*, 414 A.2d at 508–09.

²²⁶ *Id.*

²²⁷ A joint proprietary interest means a property right, “specifically, the interest held by a

required.²²⁸ The joint venturers must each have a right to share in the profits, and finally there is a duty to share in the losses.²²⁹ The court will not find a joint venture exists without each of these five elements.²³⁰

The DAO easily meets the five elements set out under the Delaware criteria. First, there is a community of interest for a common purpose. The DAO is a decentralized venture capital fund funded by investors using Ether, who in turn receive tokens in proportion to their investment.²³¹ In purchasing Ether and investing in the DAO, the token-holders join together for the common purpose of investing in the crowdfunding venture. This pool of investors creates a community of interest joined for the common purpose of investing in the DAO and crowdfunding projects. Each investor also has the right to control part or all of the enterprise.²³² The token-holders are then able to vote on which projects they want to fund through the DAO.²³³ Because each token-holder has the right to vote on which venture to fund or on alterations to the code,²³⁴ they also retain a right of control over the venture. Each investor also has a proprietary interest in the enterprise.²³⁵ In purchasing Ether,²³⁶ the investors in the DAO have a proprietary interest in their tokens—which they can buy, sell, or exchange—granting rights in the DAO.

The investors in the DAO also have the right to share in the profits²³⁷ and in the losses²³⁸ of the venture. Each token provides the investor with a portion of ownership over the DAO along with a right to

property owner together with all appurtenant rights, such as a stockholder's right to vote the shares." *Proprietary Interest*, BLACK'S LAW DICTIONARY (10th ed. 2014).

²²⁸ *Warren*, 414 A.2d at 509.

²²⁹ *Id.*

²³⁰ *Id.*

²³¹ See, e.g., DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 11) ("Indeed, the first decentralized organization, *The DAO*, launched in May of 2016. *The DAO* was a decentralized venture capital fund, which acted as a hub for large or small investors seeking to put money into innovative blockchain-based projects.").

²³² The second element under the Delaware criteria establishing a joint venture. See *supra* cases cited note 224.

²³³ See DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 11) ("[I]t implemented a plutocratic governance model, granting those who invested money in the organization with the right to vote (in proportion to their holdings) on whether or not the organization should fund blockchain-based projects.").

²³⁴ See *supra* note 103.

²³⁵ The third element establishing a joint venture. See *Warren v. Goldinger Bros., Inc.*, 414 A.2d 507, 508–09 (Del. 1980).

²³⁶ Popper, *supra* note 95.

²³⁷ The fourth element establishing a joint venture. See *Warren*, 414 A.2d at 509.

²³⁸ The fifth element establishing a joint venture. See *Warren*, 414 A.2d at 509. Although, it should be noted that not every state requires that a joint venturer have a duty to share in the losses. See *In re Carpenter*, 205 F.3d 1249, 1252 (10th Cir. 2000) (explaining that a "loss" does not necessarily mean a monetary loss but can also mean out-of-pocket expense, lost time, or expended efforts).

share in the profits of its investments in crowdfunded ventures.²³⁹ At the same time, purchasing each token comes with a risk of loss. If the DAO chooses to fund an unsuccessful venture, each token-holder experiences a loss of profit that could have been achieved through another venture. The DAO thereby meets all of the elements necessary to establish a joint venture.

C. *Objections*

It is possible that a court will take a conservative approach to the agreement and define the DAO as a joint venture if it finds that the investors are joined for the single enterprise of investing in the crowdfunded venture for a limited duration. However, the classification of the DAO as a general partnership is more appropriate. One objection to the classification of the DAO as a general partnership concerns the duration of the enterprise. Some may argue the DAO is for a limited duration and purpose and is therefore not a general partnership.²⁴⁰ However, because of the nature of the relationships is between token-holders in the DAO, it is not for a limited purpose or duration. Rather, the investors in the DAO join together to fund *any* venture the majority of the token-holders vote on.²⁴¹ Thus, every token-holder will be joined together in potentially several different investments—at times, not even investments the token-holder wanted to pursue.²⁴² The DAO is thereby more appropriately defined as a general partnership.

Moreover, the DAO is more like a general partnership than it is a corporation. Although the members of the DAO “invest” in various projects through their purchase of tokens, the amount of control the members share over the organization is critical to its status as a general partnership.²⁴³ Unlike a typical corporation, the DAO members do not leave management and control in the hands of a board of directors or officers.²⁴⁴ Rather, the decentralized structure of the DAO and its reliance on blockchain technology allows for its members to view, access, and modify the terms of the organization. In addition, its democratic governance model also provides the members with control over which projects it funds.²⁴⁵ This control over the management in the

²³⁹ See, e.g., ALLEN & OVERY LLP, *supra* note 3.

²⁴⁰ See, e.g., *Inv. Assocs. v. Summit Assocs., Inc.*, 74 A.3d 1192, 1207 (Conn. 2013).

²⁴¹ See ALLEN & OVERY LLP, *supra* note 3, at 3–5.

²⁴² Because of the nature of the DAO, token-holders will vote on projects they wish to fund. It is certainly possible that the project an investor wanted to fund is not chosen, or that a project an investor did not want to fund is similarly voted on by the majority.

²⁴³ See discussion *supra* Part II; see also discussion *supra* Section III.A.

²⁴⁴ See discussion *supra* Section I.C.

²⁴⁵ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 9, at 4). The DAO implemented a plutocratic governance model that gave those who invested money in the organization the right

enterprise is significant. As a general partnership, the question then arises as to whether the interests the token-holders own in the DAO are securities. This Note argues that the interests owned by the investors in the DAO are securities governed by U.S. securities laws.

D. *Ether Is an Investment Contract Under Howey, and Is Therefore a Security*

Under *Howey*, an investment contract is a contract, transaction, or scheme whereby a person invests his money in a common enterprise and is led to expect profits solely²⁴⁶ from the efforts of a third party.²⁴⁷ Applying the four prongs to the facts of the DAO in particular, investment in the DAO through the purchase of Ether should be considered an investment contract and subjected to securities regulation.

As to the first prong, the members of the DAO invested capital in the venture through their purchase of Ether.²⁴⁸ Similar to the facts of *Howey*,²⁴⁹ the members of the DAO were offered an opportunity to invest money and share in the profits of an enterprise. In the case of the DAO, this was through various crowdfunding ventures.²⁵⁰ The investments also satisfy the second prong of *Howey*,²⁵¹ requiring that the investors are led to expect profits from their contribution of capital. When members of the DAO purchased their Ether tokens, each received a right to vote on ventures to be funded by the DAO, to vote on changes to the DAO itself, and a right to profits earned by the crowdfunded

to vote on whether or not the organization should fund various projects. *Id.*

²⁴⁶ Not all courts require that the expectation of profits be derived solely from the efforts of others where that requirement, when applied literally, would be unmanageable. Jonathan M. Sobel, Note, *A Rose May Not Always Be a Rose: Some General Partnership Interests Should Be Deemed Securities Under the Federal Securities Acts*, 15 CARDOZO L. REV. 1313, 1324 (1994). The Ninth Circuit, for example, recognized that investors may be dependent on the managerial efforts of others, but are not “solely dependent,” as required by *Howey*. See, e.g., *SEC v. Glenn W. Turner Enters.*, 474 F.2d 476, 481–83 (9th Cir. 1973). In *Glenn W. Turner Enterprises*, the Ninth Circuit relaxed the “solely” requirement to prevent investors who contributed some degree of effort from evading securities regulation. *Id.* Instead, the court held that the third prong of the *Howey* test should focus on “whether the efforts made by those other than the investor [were] the undeniably significant ones, those essential managerial efforts which affect[ed] the failure or success of the enterprise.” *Id.* at 482. The Supreme Court adopted this modification in *United Housing Foundation, Inc. v. Forman*, 421 U.S. 837, 852 (1975).

²⁴⁷ See *supra* note 246. The efforts of a third party are also referred to as the efforts of a “promoter.”

²⁴⁸ ALLEN & OVERY LLP, *supra* note 3; see also DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7).

²⁴⁹ See *supra* text accompanying notes 162–64.

²⁵⁰ ALLEN & OVERY LLP, *supra* note 3; see also DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7).

²⁵¹ *SEC v. W.J. Howey Co.*, 328 U.S. 293, 299–300 (1946).

ventures.²⁵²

The investors in the DAO were also part of a common enterprise and led to expect profits solely from the efforts of a third party, satisfying the remaining two prongs of *Howey*.²⁵³ When the DAO launched in May 2016, more than 10,000 people worldwide invested in the DAO.²⁵⁴ Together, these 10,000 individuals formed the common enterprise required under *Howey*.²⁵⁵ The structure of the DAO is such that investors contribute funds in exchange for Ether, granting them the right to vote on crowdfunding ventures the DAO will support, with the expectation that investors will receive a return on their investment.²⁵⁶ Once a proposed venture receives a certain number of votes from the Ether-holders, the DAO automatically funds the project.²⁵⁷ At this point, the investors in the DAO lack managerial control over the specific projects and rely entirely on the efforts of a third party to carry out the project.²⁵⁸ Because of the democratic structure of the DAO, investors who chose not to vote for the chosen venture are nevertheless entitled to profit from it.²⁵⁹

In *Howey*, the fact that the investors in the farm lacked the skills, knowledge, and equipment to cultivate, harvest, and market the products was evidence that they had no desire to occupy the land but were attracted by the potential return on their investment.²⁶⁰ Because of the complex nature of the DAO itself, it is unclear that the investors in the project would necessarily lack the skills or knowledge to manage the ventures funded by the DAO. Even investors who do not vote in favor of funding certain projects are nevertheless entitled to a return.²⁶¹ This is evidence that the Ether-holders are attracted by a potential return on investment, not in the individual venture itself. Thus, the DAO is a scheme whereby a person invests his money in a common enterprise and is led to expect profits solely from the efforts of a third party. As such, the DAO is an investment contract, with Ether as the security interest. Together, the DAO and its sale of Ether should be considered security interests subject to SEC regulation.

²⁵² See generally ALLEN & OVERY LLP, *supra* note 3.

²⁵³ *Howey*, 328 U.S. at 300.

²⁵⁴ Metz, *supra* note 1.

²⁵⁵ *Howey*, 328 U.S. at 300.

²⁵⁶ See generally ALLEN & OVERY LLP, *supra* note 3.

²⁵⁷ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 10–12).

²⁵⁸ del Castillo, *supra* note 2.

²⁵⁹ *Id.*

²⁶⁰ *Howey*, 328 U.S. at 300.

²⁶¹ DE FILIPPI & WRIGHT, *supra* note 43 (manuscript at ch. 7, at 11) (discussing that once a proposed investment project receives a certain number of votes, the entire DAO will automatically fund the project); see also del Castillo, *supra* note 2.

E. *Objections*

Usually, interests in general partnerships are not securities.²⁶² However, assuming decentralized organizations like the DAO are a general partnership,²⁶³ the partnership interest is still properly considered a security. General partnership interests are not among the enumerated securities and courts tend to presume that a general partnership interest is not an investment contract, and therefore not a security.²⁶⁴ The rationale behind this presumption is that general partnerships grant investors access to partnership information and the ability to participate in management and control over the enterprise.²⁶⁵ However, general partners are sometimes passive investors who intend to let others manage their investments and in these circumstances, the same rationale should not apply.²⁶⁶

There is precedent holding that general partnership interests may constitute investment contracts subject to securities regulation. In *Williamson v. Tucker*,²⁶⁷ the Fifth Circuit noted that general partnership interests are generally not considered investment contracts but further stated that the fact that the investment is part of a general partnership does not insulate it from investment contract analysis. In *Williamson*, the court proposed three alternatives under which general partnership interests might be considered investment contracts.²⁶⁸ A general partnership interest can be a security if the investor can establish that:

- (1) an agreement among the parties leaves so little power in the hands of the partner or venturer 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

²⁶² J. William Callison, *Changed Circumstances: Eliminating the Williamson Presumption That General Partnership Interests Are Not Securities*, 58 BUS. L. 1373 (2003). It is conventional wisdom that partnership interests in general partnerships are not securities. *Id.*

²⁶³ See discussion *supra* Section III.A.

²⁶⁴ Sobel, *supra* note 246.

²⁶⁵ *Id.*

²⁶⁶ *Id.* Sobel argues that courts should consider whether the investor is adequately protected by other laws before precluding the treatment of general partnership interests as a security. In instances where general partnerships include investors who lack the ability to participate in management, the investors deserve the protection of the securities acts. *Id.* at 1320. William Callison made a similar argument. See Callison, *supra* note 262. According to Callison, unless courts abandon the presumption that general partnership interests are not securities, it is likely that promoters will create limited liability partnerships in which vulnerable partners invest their money in schemes in which they rely on one another to generate profits. *Id.* These transactions, according to Callison, require just as much oversight as the traditional investment scheme. *Id.*

²⁶⁷ *Williamson v. Tucker*, 645 F.2d 404 (5th Cir. 1981), *cert. denied*, 454 U.S. 897 (1981).

²⁶⁸ *Id.* at 424.

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.²⁶⁹

In the case of the DAO, the third alternative proposed by the *Williamson* court suggests that although general partnership interests are presumed *not* to qualify as securities, because of the irreplaceability of the venture managers,²⁷⁰ the DAO interests may nonetheless constitute an investment contract. Once a proposed venture reaches a certain number of votes from Ether-holders, the smart contracts of the DAO automatically distribute funds accordingly.²⁷¹ Although the investors in the DAO have the right to control which projects they vote for and to vote on changes in structure and management of the DAO itself, they retain practically no control over the projects themselves.²⁷² Thus, although the DAO is a general partnership, the partners cannot replace the manager of the enterprise or otherwise exercise meaningful partnership powers.²⁷³

In addition, the SEC has already prosecuted Bitcoin as a security.²⁷⁴ In *SEC v. Trendon T. Shavers & Bitcoin Savings & Trust*, the U.S. District Court for the Eastern District of Texas upheld SEC penalties against Trendon Shavers.²⁷⁵ In so holding, the district court found that Bitcoin investments were securities under federal securities laws.²⁷⁶ Like Bitcoin, Ether is a digital currency running on the Ethereum blockchain, and is technically similar.²⁷⁷ That Bitcoin, another form of digital currency, has already been treated as a security by the SEC and U.S. courts is evidence that Ether should similarly be considered a security interest subject to regulation.

In July 2017, the SEC also issued an Investigative Report, indicating

²⁶⁹ *Id.*

²⁷⁰ del Castillo, *supra* note 2.

²⁷¹ ALLEN & OVERY LLP, *supra* note 3, at 1.

²⁷² del Castillo, *supra* note 2.

²⁷³ This is the third alternative in *Williamson*. See *Williamson*, 645 F.2d at 424.

²⁷⁴ SEC v. Trendon T. Shavers & Bitcoin Savs. & Tr., No. 13-CV-416, 2014 WL 4652121 (E.D. Tex. Sept. 18, 2014).

²⁷⁵ *Id.* The district court noted that the uncontested summary judgment evidence established that Shavers knowingly and intentionally operated a Ponzi scheme by repeatedly making misrepresentations to investors concerning the use of bitcoins. *Id.* These misrepresentations included how he would generate returns and the safety of the investment. *Id.* In reality, Shavers used the bitcoins received from investors to pay returns and withdrawal on outstanding Bitcoin Savings and Trust investments and diverted the investors' bitcoins for personal use. *Id.*

²⁷⁶ *Id.* The district court permanently enjoined Shavers and the Bitcoin Savings and Trust from violating section 10(b) of the Securities Exchange Act of 1934, from violating section 17(a) of the Securities Act of 1933, and from violating section 5 of the Securities Act. *Id.* The court also held that Shavers and Bitcoin Savings and Trust were jointly and severally liable for disgorgement of over \$38 million. *Id.*

²⁷⁷ Li, *supra* note 25.

that it would likely treat DAO tokens as securities.²⁷⁸ Because the investors in the DAO invested money with a reasonable expectation of profits, derived from the managerial efforts of others, the SEC determined that the tokens in the DAO and other tokens on the Ethereum blockchain are securities.²⁷⁹ However, the SEC was silent on whether these securities are also partnership interests. The SEC ultimately decided that it would not bring an enforcement action against those involved in the DAO, “given the facts and circumstances.”²⁸⁰ However, given the SEC’s determination, it is important to clarify whether all investors in the DAO would be subject to general liability. When the DAO software was manipulated in June 2016, the attacker transferred more than \$3.6 million from the DAO into another entity.²⁸¹ Without securities law protection, the victims of this attack are left without valuable SEC penalties and recourse. Unlike the traditional general partnership, the partners in the DAO would be left unprotected and without adequate remedy.

CONCLUSION

When the DAO launched in May 2016, it rapidly became the most successful crowdfunded venture to date,²⁸² and it opened the door to expand on the technology of decentralized organizations. Despite the many benefits²⁸³ of the technology underlying decentralized organizations like the DAO, the uncertainty surrounding its legal status hinders further development and exposes investors to significant risks. As such, this Note proposes that under U.S. partnership and securities laws, the DAO is a general partnership and that the interests in the DAO, namely the Ether tokens, are investment contracts and therefore securities subject to state and/or federal regulation.

²⁷⁸ SECS. & EXCH. COMM’N, RELEASE NO. 81207, REPORT OF INVESTIGATION PURSUANT TO SECTION 21(A) OF THE SECURITIES EXCHANGE ACT OF 1934: THE DAO (July 25, 2017), <https://www.sec.gov/litigation/investreport/34-81207.pdf>.

²⁷⁹ *Id.*

²⁸⁰ Jeff John Roberts, *SEC Says Digital Tokens Are Securities, Warns of Fraud*, FORTUNE (July 25, 2017), <http://fortune.com/2017/07/25/sec-says-digital-tokens-are-securities-warns-of-fraud>.

²⁸¹ Siegel, *supra* note 8.

²⁸² del Castillo, *supra* note 2.

²⁸³ See discussion *supra* Section I.C.