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Decentralized Autonomous Organizations (DAOs): Overview

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A Practice Note providing an introduction to decentralized autonomous organizations (DAOs). This Note discusses legal status of DAOs, application of US securities laws to DAOs, taxation of DAOs, limiting DAO member liability with legal "wraps," and bankruptcy matters.

A decentralized autonomous organization (DAO) is a software-enabled organization built and governed by smart contracts on a blockchain network (for example, Ethereum). A smart contract is a set of rules written in computer code on a blockchain network that enables a network of computers to communicate and execute pre-programmed transactions once certain conditions are met.

Some have called DAOs "digital flashmobs with money" and others have referred to them as "group chats with a bank account." This Note explains DAOs and their mechanics, and covers regulatory, tax, bankruptcy, formation and organizational considerations related to DAOs, as well as legal rights and obligations of DAOs.

DAOs Explained

DAOs are organized by people or entities who pool digital assets to accomplish a common goal. They may want to socialize, talk about a common interest, or create, buy, or fund an asset or project. The DAO members make the decisions – good decisions lead to the creation of value, and, in turn, more users.

Members typically acquire rights in a DAO by purchasing the DAO's native token, which confers voting rights in the DAO's governance and operations. Token holders propose and vote on initiatives to advance the DAO's founding purpose.

Because smart contracts are verifiable by anyone who views the blockchain, they are transparent. A DAO can therefore execute transactions without third-party intermediaries, while still retaining the security and encryption that underpin blockchain technology. Once members of a DAO collectively decide on a course of action, the DAO's smart contract automatically executes the decision. And no one can change a smart contract unless the members of the DAO vote to change it. DAO voting usually occurs through a DAO coordination or governance tool, like Snapshot.

Many web3 users view DAOs as a viable alternative to traditional legal entities because they enable a more transparent, adaptable, and efficient corporate governance structure than highly centralized systems.

DAOs may be and often are used for financial purposes. However, there are different types of DAOs, and DAOs have also been organized to:

- Bid on a copy of the US Constitution (ConstitutionDAO raised $45 million to bid on a copy of the Constitution that Sotheby's was auctioning off and disbanded after losing the auction).
- Bid on the Denver Broncos NFL franchise (the BuyTheBroncos DAO is trying to raise $4 billion to do this).
- Donate to Ukraine.
- Buy the Wu-Tang Clan album *Once Upon a Time in Shaolin* for $4 million, as PleasrDAO did.

There are different types of DAOs are usually categorized by their purpose:

- Protocol DAOs, such as Compound, Aave, and MakerDAO, which issue tokens and allow users to participate in decentralized finance (DeFi) transactions.
- Collector DAOs, such as PleasrDAO and Flamingo DAO, which, among other things, acquire collectibles.
- Social DAOs, such as Friends with Benefits and Bored Ape Yacht Club, which allow people to meet other

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like-minded people and chat about crypto and other topics or arrange in-person gatherings.

- Creator DAOs, such as ElektraDAO and ObscuraDAO, where owners create the content, distribute it, consume it, and value it. The content – usually non-fungible tokens (NFTs) – is the product of a collaboration where the DAO community and the whole community share in its value. Creator DAOs have transformative implications for the entertainment industry.

Legal Status of DAOs

A DAO is not a traditional legal entity and lacks a distinct legal personality, unlike corporations or limited-liability companies (LLCs). A DAO can be viewed as simply an amorphous organization built on computer code and existing on a blockchain. Unlike a traditional legal entity, a DAO functions in a trustless environment. Members of a DAO are unknown to one another, and they can raise money efficiently to achieve the DAO's founding purpose. This lack of formal legal recognition could make it difficult for DAOs to:

- Interact and form contracts with third parties outside the DAO.
- File or pay taxes.
- Open bank accounts or make cash transactions.
- Hold or protect off-chain assets.
- Protect its intellectual property.
- Limit the liabilities of its members.

These legal limitations have so far prevented DAOs from gaining wider adoption. The prevailing view in the legal community today is that a DAO, on its own, would likely be treated as a general partnership, which means its members do not have limited-liability protection.

It is important to note, however, that a DAO's decentralized structure does not insulate it from comporting with the laws of the jurisdiction of its members or where it conducts activity. The CFTC's enforcement action against Ooki DAO make this clear (see Legal Update, CFTC Charges Ooki with Failure to Register as FCM, Finds Members Personally Liable for DAO's Debts). A central tenet of corporate law is that equity holders of a corporation (and an LLC) are not personally liable for the debts and obligations of the corporation or the LLC as long as certain corporate formalities are maintained. And investors or other businesses may be reluctant to participate in DAOs for fear of exposing themselves to personal liability.

For this reason, some practitioners have proposed "wrapping" a legal entity around a DAO to give it the legal recognition it needs to conduct business and to protect its members from personal liability (see DAO "Wraps": Creating Legal Personality and Limiting Member Liability).

DAOs Under the US Securities Laws

Courts have not yet addressed whether DAO tokens are securities. But what the SEC has said about digital assets and DAOs, when considered with case law in other contexts, offer some context for thinking about the regulatory framework for digital asses – one that ideally will balance innovation with investor protection. Of course, as with most digital assets, there are credible arguments that DAO tokens do not satisfy at least one of the four "investment contract" elements of the *Howey* test developed by the US Supreme Court in *SEC v. Howey* (1946). Under the *Howey* test, an investment contract must satisfy the following four elements to be considered a security, subject to the US securities laws:

- An investment of money.
- In a common enterprise.
- With a reasonable expectation of profits.
- Derived from the efforts of others.

See Practice Note, SEC Regulation of Digital Assets: Evolution of SEC Approach to Digital Asset Regulation: Howey Test, Hinman Speech, and FinHub Framework.

The strongest arguments may lie under the fourth element, the efforts-of-others element, because of the decentralized nature of DAOs.

The DAO Report

In April 2016, members of the Ethereum blockchain community created the first DAO (called The DAO). The DAO resembled a traditional venture capital fund, except the fund was directed by its members, not by a central authority. It raised $150 million in Ether (or ETH), the digital token that facilitates transactions on the Ethereum blockchain, from more than 11,000 participants, the largest crowdfund ever. A hacker stole $70 million of these proceeds (in ETH) from The DAO by exploiting a vulnerability in The DAO's code. The DAO recovered the assets, but it decided to dissolve The DAO. Despite its collapse, The DAO paved the way for the proliferation of the current generation of DAOs.

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The SEC addressed the DAO concept and The DAO directly in the "The DAO Report," which it published in July 2017, detailing its investigation into The DAO. As discussed in the DAO Report, token holders of The DAO could either keep their tokens (DAO tokens) in hopes of reaping returns later, or convert their tokens into other digital assets on third-party platforms. Each token granted its holder a vote in DAO governance matters, including in selecting investment projects and deciding whether profits would be reinvested or distributed. The DAO's promoters selected a group of managers called "curators," who performed security functions and managed governance for the organization.

The SEC concluded in its report that DAO tokens were investment contracts subject to US securities laws. Focusing on the fourth element of the *Howey* test (whether the asset holders expected any profits to be generated by the "efforts of others"), the SEC concluded that The DAO's success depended largely on the efforts of its promoters and the curators, who monitored operations, safeguarded funds, and determined which investment proposals would be submitted for a vote.

Individual DAO token holders, in contrast, did not determine which proposals would make it to a vote, were not provided with enough information to make informed choices about their votes, and were limited in their ability to communicate effectively and coordinate with one another. So, the thousands of DAO token holders, who knew each other only through pseudonyms, had little choice but to rely on the curators to further the organization's goals. This, according to the SEC, satisfied the efforts-of-others element of the *Howey* test, and the SEC appears predisposed to finding an active participant in DAO-related matters.

The SEC again acknowledged, in its 2019 report Framework for "Investment Contract" Analysis of Digital Assets (Framework), that determining whether a digital asset is an investment contract likely turns on the *Howey* test's efforts-of-others element. According to the Framework, it is more likely that purchasers of a digital asset are relying on others to realize profits if that asset has one or more of the following characteristics:

- The project team is responsible for the network's development, improvement, operation, promotion, and essential tasks.
- The project team created or supported a market for the digital asset.
- The project team plays a continuing managerial role in making decisions about the network or digital asset—such as making decisions about governance, code updates, or how third parties participate in validating transactions.
- Purchasers of the digital asset reasonably expect a project team to undertake efforts to promote its own interests and enhance the value of the network or asset.

(See Practice Note, SEC Regulation of Digital Assets: FinHub Framework for Analyzing Offer and Sale of Digital Assets.)

The SEC noted in the Framework, as it had previously, that digital assets that qualified as securities when issued could later be re-classified as non-securities. William Hinman, then the Director of the SEC's Division of Corporate Finance, stated during the Yahoo! Finance All Markets Summit in June 2018 that digital assets operating on "sufficiently decentralized networks and systems" might not be securities (see Practice Note, SEC Regulation of Digital Assets: Hinman Approach to Digital Asset Regulation). Hinman focused on the fourth Howey element: "[W]hen the efforts of the third party are no longer a key factor for determining the enterprise's success, material information asymmetries recede. As a network becomes truly decentralized, the ability to identify an issuer or promoter to make the requisite disclosures becomes difficult, and less meaningful." In May 2019, then–SEC Chairman Jay Clayton likewise stated that a digital asset may no longer be classified as a security if "purchasers would no longer reasonably expect a person or group to carry out the essential managerial or entrepreneurial efforts" (see Practice Note, SEC Regulation of Digital Assets: Chairman's Letter Confirming Hinman Approach).

To evaluate the efforts-of-others element, one must determine if those efforts are sufficiently significant. Do the managerial efforts affect the failure or success of the enterprise? The DAO, for example, satisfied this test because a core group of DAO members had extensive responsibility for its day-to-day operations.

DAOs looking to mitigate the risk that their membership tokens will constitute securities might look at how courts have analyzed the efforts-of-others element in other contexts – for example, in loan-participation agreements or in general partnerships.

Loan participations. The efficient administration of loan-participation agreements depends on some centralization of management, but courts have concluded that loan participation interest income typically does not depend on the managerial efforts of others, rather income depends on the debtor's success. See, for example, *Union Planters Nat. Bank of Memphis v. Com. Credit Bus. Loans,*

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Inc., 651 F.2d 1174, 1185 (6th Cir. 1981). To the extent that investment DAOs operate like loan-participation arrangements, courts may conclude that token holders' income from these DAOs also does not depend on the efforts of others. One option for structuring a DAO that could be viewed in this way might be for any returns generated by the DAO to flow directly and automatically from the investments themselves without a manager deciding how to allocate the returns.

General partnerships. A DAO may mitigate the risk of being subject to the US securities laws if its members actively control its operations, as members might in a general partnership or a joint venture. In that respect, a DAO may be able to invoke the widely adopted *Williamson* framework, developed by the Fifth Circuit in 1981, for determining whether an individual participant in a partnership or joint venture depends on the efforts of others (*Williamson v Tucker*, 645 F. 2d 404 (5th Cir. 1981)). Any such analysis would have to consider the unique characteristics of DAOs compared to general partnerships. But under the *Williamson* test, an ownership interest in a partnership is more likely to be considered an investment contract if the answer to any of these three questions is yes:

- Is the entity's structure and management akin to that of a limited partnership or traditional corporation by leaving little power in the hands of individual owners?
- Are the individual owners so inexperienced and unknowledgeable in the affairs of the business that they are incapable of intelligently exercising their powers to promote the organization's success?
- Are the owners so dependent on the entrepreneurial or managerial abilities of a manager that they themselves could not replace the manager or otherwise exercise meaningful control over the organization?

Examining these prongs more closely:

Prong 1 – Structure and management of the organization. The *Williamson* court identified several characteristics that courts should consider in determining whether the first *Williamson* factor had been satisfied:

- The manager's formal powers compared to the investors' formal powers.
- Whether the investors exercised their formal powers.
- The venture's voting structure.
- Availability of information to investors.
- Communication among the investors.
- The number of investors.

Prong 1 focuses on the DAO's structure, including the total number of token holders participating in the DAO and the extent to which the DAO's smart contracts reflect the owners' oversight, managerial, and voting powers. The use of an individual owner's funds in a partnership is more likely to resemble an investment contract if that owner has little practical ability to influence the organization's decisions. An owner is less likely to be deemed reliant on the efforts of others if that owner has retained some authority and control over the organization.

Courts have concluded that organizations with more than several dozen general partners presumably have centralized management and control because it would be impractical for so many partners to each retain some authority and control over the organization See, for example, *Koch v. Hankins*, 928 F.2d 1471 (9th Cir. 1991); *Securities & Exch. Comm'n v. Professional Assocs.*, 731 F.2d 349 (6th Cir. 1984). But DAOs could successfully argue that their unique structure and decision-making enables larger numbers of individuals to maintain meaningful control over the organization's affairs.

Prong 2 – Ability of owners to intelligently exercise control.

Investors need not be experts to be capable of intelligent management, but they should have enough experience and knowledge that they can make independent decisions about their investments. How much experience and knowledge an individual DAO member has about the DAO's business will determine whether this factor applies.

Prong 3 – Owners' dependence on manager's abilities.

Owners with a realistic alternative to relying on a manager, even if that alternative is not necessarily preferable, might not be considered dependent on the efforts of others. Courts and regulators are likely to consider how complete a particular DAO's network is and whether a member can effectively use the DAO's governance mechanisms to control the DAO's future.

Ultimately, whether the SEC or a court would view a DAO as offering and selling securities depends on that particular DAO's facts and circumstances. When forming a DAO, members should consider:

- The DAO's purpose.
- How many token holders will participate in the DAO.
- What powers will token holders have.
- When will the operational network will be complete.
- How many essential functions and operations will be performed by on-chain smart contracts.

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- How token holders will use on-chain smart contracts to effect DAO decisions.

Taxation of DAOs

The token-holders of a DAO are not anonymous. Even though a party's personal details may not be visible, the public key associated with any transaction is permanently baked into the blockchain. And token holders that are US citizens must report income to the IRS, no matter whether the relevant payment occurs through a blockchain or otherwise.

Which US tax rules apply to a business, investment fund, or other commercial venture and its owners largely depends on the type of entity that conducts the arrangement. US tax law is complex, but well-developed when it comes to such familiar structures as corporations, partnerships, limited liability companies (LLCs), and trusts. However, there is limited guidance about how tax law treats cryptocurrency, non-fungible tokens (NFTs), or other assets existing on a blockchain, including DAOs. Until the government releases more specific guidance, DAOs will need to extrapolate from the existing legal framework as it applies to entities similar to DAOs.

Some DAOs have been organized with a traditional structure, often using US LLCs. US federal income tax treatment of LLCs is well understood. By default, domestic LLCs are not subject to income tax directly. Instead, their owners are taxed on their proportionate share of the LLC's income. Under the entity classification rules, if the LLC has more than one owner, the LLC is treated as a partnership, or if it has a single owner, it is treated as a disregarded entity for tax purposes. Domestic LLCs can also elect to be classified as corporations for US tax purposes. In that case, the LLC would be subject to US federal corporate income tax on its worldwide income and its owners would be subject to tax on distributions treated as a dividend or on those that exceed their basis in their equity interest.

Even if a DAO is organized as a domestic LLC and does not make an election to be classified as a corporation for US federal income tax purposes, it may still be treated as a corporation under the publicly traded partnership rules if its interests are readily tradeable and less than 90% of its gross income in any taxable year is passive income.

Assuming DAOs operating through domestic LLCs would be treated for tax purposes the same way as any other LLC, a DAO choosing to operate through another form of US or non-US legal entity would be taxed according to the rules that apply to such entities generally.

A DAO that exists only through a contractual arrangement among its members on the blockchain that does not operate through any legal entity may, nevertheless, be treated as an entity for US tax purposes. Applicable tax regulations state that a contractual joint venture will be considered a partnership for tax purposes if "participants carry on a trade, business, financial operation, or venture and divide the profits." This definition is quite broad and would appear to include many DAOs that intend to carry out traditional investment activities or operate using a traditional business structure. Ultimately, this determination will need to be made on a case-by-case basis considering the facts and circumstances of a DAO's particular activities.

Whether a particular DAO that does not operate through a legal entity is considered to be domestic or foreign for US federal income tax purposes also affects the taxation of the DAO and its owners. An entity is foreign if it is not created or organized in the US or any state. Under the entity classification rules, by default a foreign entity is treated as a corporation if all members have limited liability, and a partnership if it has two or more members and at least one member has unlimited liability. If a DAO were to be treated as a foreign corporation, it might subject US equity owners to pass-through taxation under either the passive foreign corporation rules or the controlled foreign corporation rules. For more information on entity classification rules, see Practice Notes, Choice of Entity: Tax Issues and Check the Box Rules for Foreign Businesses.

Tax consequences for the members of a DAO also depend on what they actually "own."

Equity. If a DAO is formed as an actual legal entity or if it operates through a contractual arrangement that is treated as an entity for US tax purposes, someone will presumably be treated as "owning the equity." The determination of whether an instrument or other group of contractual rights constitutes an equity instrument for tax purposes is based on an examination of facts informed by a long history of tax laws and guidance. Recorded owners of a DAO could be considered equity-holders if they have the right to participate in the profits and losses of the DAO and if they participate in the management of the entity.

Debt. For an arrangement to constitute debt for US tax purposes, it generally has to include many of the traditional features of a debt instrument—a maturity date, a right to a fixed payment, an interest rate, and the ability for the holder to demand payment as a creditor rather than as an equity-holder. Debt instruments are also distinguished from equity instruments by lacking

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the characteristics of equity described in the previous paragraph. The economic arrangement among the owners of a DAO could be designed to resemble debt for tax purposes. However, more often than not, the owners of a DAO have the right to an equity-like return on the DAO's assets and the ability to participate in the decentralized management and governance of the DAO, which will tend to cause their interest in the DAO to constitute equity rather than debt.

Derivatives or other instruments. It is possible that a DAO's recorded owners could be treated as holding only a contractual right to certain of the DAO's economics. For example, one could design an arrangement where blockchain hold-rights resemble a forward contract with respect to the DAO's assets. The flexibility of a DAO would provide many other opportunities for its economics to reflect contractual arrangements or derivatives seen in traditional investment and business contexts.

Determining the U.S. tax treatment of the DAO's owners and its other economic beneficiaries can be as complex as determining whether it is an entity for tax purposes, and will require the same kind of extensive analysis.

In recent years, the IRS has been aggressive in ensuring that digital-asset holders comply with their tax obligations. As a result, the creators and recorded owners of a DAO should get proper advice on how they should comply with tax obligations as the IRS expands its scrutiny to DAOs. But, as DAOs become more common, the IRS may address issues specific to DAOs as part of their evolving guidance on the issues raised by the digital-asset economy.

DAO "Wraps": Creating Legal Personality and Limiting Member Liability

DAOs are limited in their natural state, with the absence of limited liability and legal personality. Because of this, DAOs need to take on legal form to contract with stakeholders and to perform more traditional functions, while also limiting personal liability of its members. The following arrangements provide a legal "wrap" to allow DAOs to operate and transact within the existing legal framework to varying degrees, depending on a DAO's needs:

- Cayman Foundation DAO (see Cayman Foundation DAO).
- Singapore Company DAO (see Singapore Company DAOs).
- Vermont Blockchain-Based LLC (see Vermont Blockchain-Based LLC).
- Wyoming DAO LLC (see Wyoming DAO LLC).
- Tennessee DO (see Tennessee Decentralized Organizations (DOs)).
- Colorado Uniform Limited Cooperative Association (see Colorado Uniform Limited Cooperative Association).
- Unincorporated Nonprofit Association (UNA) (see Unincorporated Nonprofit Association (UNA)).

Cayman Foundation DAOs

A Cayman foundation differs from an ordinary company primarily because a Cayman foundation does not require members. The Cayman Companies Act governs a Cayman foundation (unless the Cayman Companies Act is excluded, modified, or inconsistent with the Cayman Foundation Companies Act). The fundamental corporate structure of a Cayman foundation is tried and tested, and legal jurisprudence regarding Cayman companies also applies to a Cayman foundation.

Key features of a Cayman foundation DAO:

- Purpose: Cayman foundations may be formed for any lawful purpose, including a charitable one. This is an attractive feature for DAOs, which may have different objectives than for-profit companies.
- Separate legal personality: A Cayman foundation is defined as a legal person, which means the DAO can be a contracting entity and it can:
  - interact and form contracts with third parties;
  - file and pay taxes;
  - open bank accounts and make cash transactions;
  - hold and protect off-chain assets;
  - limit the liabilities of its members (if it has members);
  - protect intellectual property;
  - serve as a vehicle for airdrops and grants; and
  - act as a parent or holding entity with subsidiaries to carry out functions for a project.
- Flexibility: The governing rules, structure, and roles of a Cayman foundation can be adapted to suit a range of bespoke needs. And, because the constitution of a Cayman foundation can be supplemented with bylaws that are not filed with the Register of Companies, they are private, affording the Cayman foundation some privacy and the flexibility to set its own rules about structure and management. The bylaws may relate to any aspect of the Cayman foundation or to any of the duties or powers of the directors or other officeholders,

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including how to achieve the foundation's objectives. For DAOs, the substantive rules about how community members will govern the DAO typically live in the bylaws, which may also restrict the directors' powers in keeping with the DAO's democratic governance model.

- Limited liability: DAOs can incorporate a Cayman foundation as an orphan entity without any members or shareholders. Also, since the Cayman foundation is a company, it provides liability protection. This protection from personal liability would extend to the developers of the DAO, for example, since the directors manage the objectives and business of the DAO for the Cayman foundation.

A typical Cayman foundation has the following roles:

- Founder: This is usually the person who established the entity through a contribution of assets. The Cayman Foundation Companies Act does not formally define the role of founder, so the governing documents may specify what (if any) powers the founder retains. For example, the founder may reserve the power to appoint the directors or amend the governing documents of the Cayman foundation, but may also have no ongoing role in the foundation. Since DAOs utilize a bottom-up governance structure, a Cayman foundation DAO founder would not normally retain any powers in the Cayman foundation.
- Directors: As with an ordinary company, a Cayman foundation is managed by a board of directors, with the same powers as in an ordinary Cayman company, though they may be restricted to align with the DAO's specific objectives.
- Members/shareholders (if any): While a Cayman foundation must initially be incorporated with one or more members (the same as an ordinary Cayman company), one of the key features of a Cayman foundation is that it can cease to have members at any time without affecting the foundation's existence, capacity, or powers. A Cayman foundation DAO may exist as an orphan entity without any members or shareholders. An ownerless Cayman foundation DAO therefore fits nicely with the ethos of the hierarchy-less DAO and its community.
- Beneficiaries: Cayman foundations may choose to have beneficiaries. Unless otherwise specified, the beneficiaries will not have any powers, rights, or standing to sue the foundation (such a supervisory function is vested in a "supervisor"). Beneficiaries may be specified people or a class of people – for example, token holders or certain community members that the Cayman foundation DAO may be structured to reward. As beneficiaries of the Cayman foundation DAO, token holders would not have any personal liability for the foundation's debts or financial losses.
- Supervisors: If a Cayman foundation ceases to have members, it must have one or more supervisors (who may also be directors). As suggested by their title, supervisors enforce the rules of the Cayman foundation and typically have the right to access its files, books, and accounts. A supervisor has no ownership or economic entitlement in a Cayman foundation.

Caymans Virtual Asset Service Providers (VASP) Act

The Caymans' Virtual Asset Service Providers (VASP) Act offers a regulatory framework for virtual asset service providers. It defines "virtual assets" as digital representations of value that can be traded or transferred and that can be used for payment or investment purposes. A DAO that offers tokens may constitute a VASP under the VASP Act. The VASP Act requires entities engaging in virtual asset services to be licensed and/or to register with the Cayman Islands Monetary Authority. The law has been in effect since October 2020 and is expected to help Cayman Islands entities undertake fintech-related services and activities.

Singapore Company DAOs

Some DAOs seeking legal status have made a home in Singapore. Although the Singapore corporate structures are not a perfect fit for DAOs, they provide a sufficient legal wrap to allow DAOs to operate and transact within an existing legal framework.

As a starting point, in Singapore, the most common legal entity is a company limited by shares, which is created by registering with the country's Accounting and Corporate Regulatory Authority (ACRA). While the incorporation process and ACRA's platform are lauded for their efficiency, the share-transfer process is not instantaneous. This complicates things for a DAO, where a transfer of tokens is immediate. DAO organizers should be aware that members of a Singapore company are not anonymous – anyone can purchase a business profile on the ACRA platform, which would identify them.

One workaround for this is to organize a DAO as a Singapore company limited by guarantee. Unlike a company limited by shares, a company limited by guarantee is more suitable for DAOs with a non-profit element, like a collector DAO or a social DAO. A company limited by guarantee is prohibited from paying any dividends or profits to its members.

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Establishment of a Singapore company DAO, whether a company limited by shares or company limited by guarantee, would require an advisory board composed of token holders to be stablished under its constitution. These token holders would serve as the pseudo-decision-makers of the company by initiating and voting on proposals. Then, a project team or other party, acting as members of the company, would execute the DAO's decisions. These members would then appoint directors, who owe a fiduciary duty to the company to act in its best interests, who would in turn implement the will of the advisory board. The constitution would specify that the company's members and directors are obligated to execute the wishes of the DAO advisory board.

Vermont Blockchain-Based LLC

In 2018, Vermont became one of the first states to enact legislation tailored to blockchain-based companies when it enacted a law permitting establishment of blockchain-based limited liability companies (BBLLCs). While the law does not explicitly mention DAOs, it generally applies to companies that "utilize blockchain technology for a material portion of its business activities." To qualify for the BBLLC designation (and its limited liability protection), a company's operating agreement must include:

- A description of its mission or purpose.
- Disclosure of its level of decentralization.
- Whether the blockchain is public or private.
- Voting and governance procedures.
- Disclosure of security-breach mitigation protocols.
- Its membership-acquisition process.
- An account of the rights and obligations of the participants.

Wyoming DAO LLC

In April 2021, the state of Wyoming passed a law, which was amended in March 2022, that allows a DAO to incorporate as an LLC and defines DAOs as "a limited liability company whose articles of organization contain a statement that the company is a decentralized autonomous organization" (see Legal Update, Wyoming Passes DAO Supplement Recognizing Decentralized Autonomous Organizations (DAOs) as LLCs). Under this law, the traditional legal protections afforded a Wyoming LLC are extended to algorithmic and member-managed DAOs incorporated under the law, with a few exceptions.

Key features of a Wyoming DAO LLC:

- DAO LLCs must keep a registered agent in Wyoming.
- A DAO's legal name must include "DAO" or "LAO" (Limited Autonomous Organization) or "DAO LLC."
- A DAO LLC is presumed to be member-managed unless its articles of organization define it as algorithmically managed.
- The DAO LLCs articles of organization must include the DAO's smart contract, and the articles of organization must be amended whenever the smart contract changes. The contract prevails if there is any conflict with the articles of organization.
- If a DAO LLC does not approve any proposals or take any actions for one year, it is automatically dissolved.
- Except as specifically modified by the DAO LLC law, the laws governing regular Wyoming LLCs apply to DAO LLCs.
- Members do not owe any fiduciary duties, unless the articles state otherwise.

Tennessee Decentralized Organizations (DOs)

In April 2022, Tennessee amended its Limited Liability Company Act to include decentralized organizations (DOs). The requirements for a Tennessee DO LLC are nearly identical to those of a Wyoming DAO LLC with a few exceptions. For example, the Tennessee law requires a quorum of a majority of members for a vote, while Wyoming allows a DAO's articles to define its quorum.

Colorado Uniform Limited Cooperative Association

Colorado has an innovative legal structure that can provide some DAOs adequate legal personality and member limited liability. An LCA under the Colorado Uniform Limited Cooperative Association (CULCA) Act, is "an autonomous, unincorporated association of persons united to meet their mutual interests through a jointly owned enterprise primarily controlled by those persons." Unlike LLCs, a CULCA can have two types of members: patrons who conduct business for the CULCA and investors who only make contributions. Patron members have financial rights, and a CULCA can disburse patrons' profits in proportion to their individual contributions or services. Members can vote based on membership (one vote for each member) or on token holdings. A CULCA is governed by its articles and bylaws, which allow for the integration of DAO-based governance principles.

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Federal Organizational Considerations

Although a DAO seeking a legal identity can be organized under state law as a Vermont BBLLC, Wyoming LLC, Tennessee DO LLC, or CULCA DAO, such legal entities remain subject to restrictions under federal laws, including the Investment Company Act of 1940 and the Securities Exchange Act of 1934, as amended, which address, for example, the maximum number of members an entity can have and whether any member can be a non-accredited investor without triggering SEC registration, reporting, or other requirements, obligations, or penalties under such laws. Additionally, the Corporate Transparency Act, passed as part of the 2021 National Defense Authorization Act (NDAA), increased reporting requirements to identify members of LLCs and LCAs, which could hamper the efforts of any DAO organized as such entities to keep its members anonymous.

Unincorporated Nonprofit Association (UNA)

Under the Uniform Unincorporated Nonprofit Association Act (UUNAA), an unincorporated nonprofit association (UNA) is formed when two or more members join under an agreement – which can be oral, in a record, or implied from conduct – with at least one common, nonprofit purpose. Social, charitable, or collector DAOs formed without a for-profit purpose might find it useful to become a UNA to order their activities and limit member liability. It is important to note that:

- The UUNAA defines staking and liquidity-mining profits used to maintain a DAO's protocol as nonprofit.
- Liability protection is dependent on jurisdiction, as not all states recognize a UNA.

Further Observations on DAO "Wraps"

For DAOs seeking to limit the liability of their members and developers, and for DAOs that want to interact with parties off-chain, some form of legal structure is necessary. And placing a DAO in a corporate "wrap" does not necessarily dilute its decentralized purpose. The DAO's community members are still free to make collective decisions (for example, to purchase art or donate or direct assets to a particular cause or project). A "wrapped" DAO may also retain a bottom-up, distributed-governance model.

DAOs may be further incentivized to embrace corporate organization or private ordering because:

- Counterparties may eventually become wary of doing business with a DAO that purports to have unlimited liability.
- As the US government applies a "tech-neutral" approach to regulating the digital asset economy, it may look to regulate DAOs like traditional corporations. DAOs may therefore be well served to be structured in a way that facilitates interacting with regulators, including paying taxes.

Treatment of DAOs in Bankruptcy

To be eligible for relief under the United States Bankruptcy Code (Bankruptcy Code), a party must fall within the definition of a "debtor" under the Bankruptcy Code. A bankruptcy debtor must be a person or municipality. (11 U.S.C. § 101(13).) A person is defined to include an individual, partnership, and corporation (11 U.S.C. § 101(41)). Some countries and certain US states (Vermont, Wyoming, Tennessee, and Colorado) have adopted DAO-specific statutes that may assist bankruptcy courts grappling with whether a DAO is eligible to be considered a debtor under the Bankruptcy Code (see DAO "Wraps": Creating Legal Personality and Limiting Member Liability).

Under any of these configurations, a DAO would appear to meet the definition of a "person" as a partnership or a corporation under the Bankruptcy Code. For example, if a DAO were to form as a Cayman foundation and file for bankruptcy protection in the US, it would appear likely to be viewed as a corporation and thus a person eligible to remain in bankruptcy, assuming the DAO met all the other eligibility requirements under the Bankruptcy Code, including, for example, Bankruptcy Code section 109(a), which requires a debtor to reside or have a domicile, a place of business, or property in the United States.

US bankruptcy courts have not actively addressed the legal status of DAOs, or whether a DAO would qualify as a person or a corporate entity that is otherwise entitled to bankruptcy relief without a specific DAO statute. As a result, a DAO that has not been "wrapped" in any of these jurisdictions or any other applicable jurisdiction that attempts to file for bankruptcy relief in the US may have a more difficult time demonstrating that it qualifies as a debtor under the Bankruptcy Code, as a bankruptcy court would have no applicable law to look to when making this determination.

For an overview on issues arising in cryptocurrency platform Chapter 11 cases generally, see Practice Note, Crypto Chapter 11 Proceedings: Overview.

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Practical Considerations for DAOs Filing for Bankruptcy in the US

While a DAO must first consider whether it is eligible to file for bankruptcy, there are other practical issues that may arise after filing. For example, how can a DAO meaningfully participate in the bankruptcy process if it is truly decentralized? And how would a DAO execute critical day-to-day decisions in a bankruptcy case or seek critical relief from a bankruptcy court? A debtor's request for relief often requires specific evidentiary support, necessitating live (or video) witness testimony. The bankruptcy petition must be signed by the debtor's authorized representative under penalty of perjury. A debtor corporation must be represented by counsel who takes direction from the debtor's authorized representatives. This depends on human beings, which does not align with the digital and decentralized nature of a DAO. It remains to be seen whether bankruptcy courts would accept alternatives such as the appointment of a chief restructuring officer or trustee to take on a DAO debtor's management responsibilities while in Chapter 11.

Also, unlike a corporation, in which natural persons govern and make decisions, a DAO's decision making is ultimately made by computer code. Where a bankruptcy trustee is involved (under either a Chapter 7, Chapter 11, or subchapter V bankruptcy), there may be practical impediments for a DAO, particularly when it comes to a DAO's cooperation with the trustee in fulfilling its duties under the Bankruptcy Code. What if a DAO's members are unwilling to cooperate with the trustee? And who would a trustee serve for purposes of appearing before a bankruptcy court and answering for a DAO's failure to cooperate? Even if some members of a DAO can be located, they are often spread across the globe, making compliance with the Bankruptcy Code a challenge.

For more information on the role and responsibilities of a Chapter 11 trustee, see Practice Note, Appointing or Electing a Chapter 11 Trustee.

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