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Scaling DAOs Through Fiduciary Duties

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DAOs (Decentralized Autonomous Organizations) are a unique type of business organization due in large part to their directly democratic governance structure. Owners of DAOs, "tokenholders," do not delegate control to a board or a general partner. Rather, tokenholders directly control a DAO and must approve every action that a DAO takes. Because tokenholders do not delegate control to an agent, the principal-agent problem is tempered in DAOs. The principal-agent problem is the basis for the fiduciary duties that govern traditional business organizations. These fiduciary duties are meant to prevent agents entrusted with power by their principals from self-dealing. Some have argued that the directly democratic structure of DAOs eliminates the need for fiduciary duties on the basis that there are no agents. The few jurisdictions that have created paths for direct incorporation as a DAO have found this argument persuasive. These jurisdictions allow DAOs to waive all fiduciary duties in their operating agreements.

But this approach to fiduciary duties in DAO governance is fundamentally flawed. Fiduciary duties are still needed in DAOs because DAO democracy is not pure democracy. Rather than following the rule of one tokenholder, one vote, DAOs generally follow the rule of one token, one vote. So, when a tokenholder has enough tokens to control a DAO, the principal-agent problem rears its ugly head. Here, the controlling tokenholder is the agent and the minority tokenholders are the principals. Due to low participation rates in DAOs, a tokenholder can more easily become a controller. The principal-agent problem can also exist in DAO governance when a tokenholder assigns its voting power to a delegate or when a DAO structurally centralizes power in a governance board. Because these principal-agent problems exist in

* BYU Law School, April 2023. My thanks to Professor Matthew Jennejohn, Dan Ankenman, Adam Moore, and all the editors at BYU Law Review who helped improve this piece. All errors are mine.

DAOs, tokenholders need fiduciary duties as an ex post protection from self-dealing.

That said, the answer to these agency problems is not a skeuomorphic application of all corporate fiduciary duties to DAOs. Rather, a tailored approach to fiduciary duties is needed. This Note provides that approach in the form of a mandatory, yet limited, fiduciary duty governance system for DAOs. This proposed system would allow DAOs to waive the duty of care and the corporate opportunity doctrine in their operating agreements but would not allow DAOs to waive the duty of loyalty and a portion of the associated duty to act in good faith. It would also balance investor protections with innovation and provide the predictability necessary to attract more investors to DAOs. In turn, this tailored system would help DAOs in their quest to scale as a type of business organization and aid in the creation of a new, decentralized economy.

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INTRODUCTION

Decentralized Autonomous Organizations ("DAOs") are internet-native[1] business organizations[2] that facilitate "cooperation via collective ownership."[3] DAOs can be used to govern a variety of business organizations, including (1) venture capital funds,[4] (2) investment clubs,[5] (3) decentralized finance ("DeFi") projects,[6] (4) non-fungible token ("NFT") projects,[7] and (5) special acquisitions.[8]

1. *Decentralized Autonomous Organizations (DAOs)*, ETHEREUM.ORG, https://ethereum.org/en/dao/ (last visited Oct. 11, 2022).

2. This Note focuses on DAOs as business organizations, but DAOs can also be used for nonbusiness organizations. *See, e.g.*, Yonca Braeckman, *Philanthropy DAOs – The Future of Giving?*, MEDIUM (Feb. 18, 2022), https://medium.com/impact-shakers/philanthropy-daos-the-future-of-giving-608cc7a829b4 (listing DAOs organized as philanthropic organizations); *see also* BALAJI SRINIVASAN, THE NETWORK STATE, 256 (2022), https://thenetworkstate.com/ (describing DAOs as a precursor to sovereign network nations). Andrew Yang has also discussed the possibility of using a DAO to govern his new "Forward" political party. *See* Bankless, *88 – Forward with Crypto | Andrew Yang*, YOUTUBE (Oct. 18, 2021), https://www.youtube.com/watch?v=CIe7FPnnQ2U.

3. Adam J. Kerpelman, 🤔 *What Is a DAO and What Is It For?*, HAUS PARTY (Feb. 8, 2021), https://daohaus.substack.com/p/-what-is-a-dao-and-what-is-it-for.

4. *See, e.g.*, *Flamingo DAO*, CRUNCHBASE, https://www.crunchbase.com/organization/flamingo-dao (last visited Nov. 20, 2022); PLEASRDAO, https://pleasr.org (last visited Sept. 16, 2022). Indeed, the first DAO ("The DAO") was formed for the purpose of being a decentralized venture capital fund. For a story of this DAO, and its meltdown, see Samuel Falkon, *The Story of the DAO – Its History and Consequences*, MEDIUM (Dec. 24, 2017), https://medium.com/swlh/the-story-of-the-dao-its-history-and-consequences-71e6a8a551ee.

5. *See, e.g.*, *Transform Any Wallet into a Web3 Investment Club*, SYNDICATE, https://syndicate.io/clubs (last visited Nov. 20, 2022); *see also* Carra Wu & Chris Dixon, *Investing in Friends with Benefits (a DAO)*, ANDREESSEN HOROWITZ (Oct. 27, 2021), https://a16z.com/2021/10/27/investing-in-friends-with-benefits-a-dao/.

6. *See, e.g.*, *MKR Governance 101*, MAKERDAO, https://makerdao.com/en/governance (last visited Nov. 20, 2022); *Introducing UNI*, UNISWAP, (Sept. 16, 2020), https://uniswap.org/blog/uni; *Governance*, ENS https://ens.domains/governance/ (last visited Nov. 20, 2022).

7. *See, e.g.*, *Governance*, NOUNS, https://nouns.wtf/vote (last visited Nov. 20, 2022).

8. *See* Kyle Chayka, *The Promise of DAOs, The Latest Craze in Crypto*, NEW YORKER (Jan. 28, 2022), https://www.newyorker.com/culture/infinite-scroll/the-promise-of-daos-the-latest-craze-in-crypto (highlighting Spice DAO, a DAO that purchased a copy of Alejandro Jodorowsky's "director's bible" for DUNE (Universal Pictures 1984)); *see also* Nilay

DAOs have recently garnered widespread interest from investors,[9] policymakers,[10] and economic activists[11] alike. As of October 2022, DAOs control a total of over $9 billion.[12] While DAOs command a substantial amount of capital, they are the new kids on the block when compared to traditional business organizations.[13] This Note seeks to chart a new path forward for DAOs to scale as a type of business organization through a mandatory, yet limited, fiduciary duty governance system.

First, this Note provides a general overview of DAOs as a type of business organization. This overview focuses on two fundamental characteristics of DAOs: (1) their directly democratic governance structure and (2) their reliance on blockchain infrastructure. After describing these two fundamental characteristics, this section concludes with a discussion of how DAOs may fundamentally alter our economic infrastructure by decentralizing control of traditionally centralized organizations.

Second, this Note surveys the current state of fiduciary duties in DAOs. In short, tokenholders can avoid *all* fiduciary obligations if the DAO (1) incorporates in a state that allows DAOs to incorporate directly as a DAO or (2) incorporates indirectly as an LLC and waives all fiduciary duties in its operating agreement. All incorporated DAOs are bound by the implied covenant of good

Patel, *From a Meme to $47 Million: ConstitutionDAO, Crypto, and the Future of Crowdfunding*, VERGE (Dec. 7, 2021, 8:15 AM), https://www.theverge.com/22820563/constitution-meme-47-million-crypto-crowdfunding-blockchain-ethereum-constitution.

9. *See, e.g.*, Lucas Matney, *VC-Backed DAO Startups Are Racing to Define What DAOs Actually Are*, TECHCRUNCH (Feb. 1, 2022, 10:16 AM), https://techcrunch.com/ 2022/02/01/ vc-backed-dao-startups-are-racing-to-define-what-daos-actually-are/; Sonal Chokshi, Zoran Basich & Guy Wuollet, *DAOs, a Canon*, FUTURE, https://future.com/dao-canon/.

10. *See, e.g.*, *SEC Issues Investigative Report Concluding DAO Tokens, a Digital Asset, Were Securities*, U.S. SEC. & EXCH. COMM'N (July 25, 2017), https://www.sec.gov/news/press-release/2017-131; Casey Wagner, *New Crypto Bill Suggests Some DAOs Be Taxed Like Businesses*, BLOCKWORKS (June 10, 2022), https://blockworks.co/new-crypto-bill-suggests-some-daos-be-taxed-like-businesses/.

11. *See, e.g.*, Ryan Sean Adams, *Why DAOs Are the New Firms*, BANKLESS (Mar. 16, 2022), https://newsletter.banklesshq.com/p/why-daos-are-the-new-firms; Tim Ferriss, *Chris Dixon and Naval Ravikant – The Wonders of Web3, How to Pick the Right Hill to Climb, Finding the Right Amount of Crypto Regulation, Friends with Benefits, and the Untapped Potential of NFTs (#542)*, TIM FERRISS SHOW (Oct. 28, 2021), https://tim.blog/2021/10/28/chris-dixon-naval-ravikant/.

12. *See Organizations*, DEEPDAO, https://deepdao.io/organizations (last visited Nov. 20, 2022).

13. For instance, "[p]rivate equity firms control more than $6 trillion in assets in the U.S." Chris Morran & Daniel Petty, *What Private Equity Firms Are and How They Operate*, PROPUBLICA (Aug. 3, 2022, 5:00 AM), https://www.propublica.org/article/what-is-private-equity.

faith and fair dealing, but the implied covenant is contract law doctrine—not a fiduciary duty.

Third, this Note describes the problems associated with the current zero-fiduciary-duty regime in DAO governance. This section describes the conditions that make DAOs fertile ground for self-dealing, and it proceeds by providing examples of self-dealing that could occur in DAOs. This section continues with an argument that the current privately ordered governance controls along with the implied covenant are not enough to (1) deter self-dealing in DAOs or (2) rectify harm done by self-dealers. This section concludes that the lack of tokenholder protection associated with the current zero-fiduciary-duty regime stands firmly in the way of scaling DAOs as a type of business organization.

Finally, this Note charts a course for scaling DAOs as a type of business organization through a mandatory fiduciary duty system that is tailored to DAOs. In this proposed governance system, DAOs will be allowed to waive the duty of care and the corporate opportunity doctrine in their operating agreements, but they will *not* be able to waive the duty of loyalty and a portion of the associated duty to act in good faith. This tailored fiduciary duty system will provide the investor protections and predictability necessary for DAOs to scale as a type of business organization.

I. OVERVIEW OF DAOS

DAOs are unique business organizations because they aim to be decentralized both in governance and infrastructure. In governance, DAOs seek to be decentralized because they are directly controlled by all holders of DAO tokens, or tokenholders,[14] through a democratic governance process. In infrastructure, DAOs are decentralized business organizations because they operate on distributed blockchain networks.[15] Economic activists have heralded DAOs as business organizations that have the potential to "flatten the complex business process that

14. *See* ETHEREUM.ORG, *supra* note 1. Some tokenholders purchase DAO tokens with money. *See DAO Crypto Tokens: What, Why and How to Buy*, BINANCE BLOG, (Jan. 30, 2022), https://www.binance.com/en/blog/fiat/dao-crypto-tokens-what-why-and-how-to-buy-421499824684903289. Other tokenholders work to earn DAO tokens. *See* Ben Schecter, *The Future of Work Is Not Corporate – It's DAOs and Crypto Networks*, FUTURE (Dec. 17, 2021), https://future.com/the-future-of-work-daos-crypto-networks/.

15. *See* ETHEREUM.ORG, *supra* note 1.

various organizations are mired in"[16] and create a "more socially-conscious [corporate] structure."[17]

A. DAOs Are Democratic Business Organizations

DAOs do not have one "leader or single point of failure."[18] Decisions in a DAO are "made from the bottom-up,"[19] by the tokenholders in a democratic process to ensure that "everyone in the organization has a voice."[20] Tokenholders typically retain *all* control of a DAO.[21] That is, all tokenholders are meant to vote on each DAO proposal through a democratic process.[22] Because tokenholders retain control of a DAO through this democratic governance process and do not delegate control to a board of directors or a manager, DAOs are *directly* democratic business organizations. As a result, this directly democratic governance structure tempers principal-agent problems in DAOs.

Agency problems arise in traditional corporations because shareholders—the principals—delegate control rights to their agents—the board of directors.[23] Once the shareholders' assets have been entrusted to the board, the board has the power to make

16. Nitin Gaur & Ananth Natrajan, *DAOs Are the Foundation of Web3, the Creator Economy and the Future of Work*, COINTELEGRAPH (Jan. 1, 2022), https://cointelegraph.com/news/daos-are-the-foundation-of-web3-the-creator-economy-and-the-future-of-work.

17. *See* Brynly Llyr, *Re-Envisioning Corporations: How DAOs and Blockchain Can Improve the Way We Organize*, WORLD ECON. F. (Feb. 8, 2022), https://www.weforum.org/agenda/2022/02/re-envisioning-corporations-how-daos-and-blockchain-can-improve-the-way-we-organize/.

18. Tarun Chitra, *Building and Running a DAO: Why Governance Matters,* FUTURE (Nov. 3, 2021), https://future.com/building-and-running-a-dao-why-governance-matters/.

19. *What Is a Decentralized Autonomous Organization, and How Does a DAO Work?*, COINTELEGRAPH, https://cointelegraph.com/ethereum-for-beginners/what-is-a-decentralized-autonomous-organization-and-how-does-a-dao-work (last visited Nov. 20, 2022).

20. *See* ETHEREUM.ORG, *supra* note 1.

21. *Id.* (noting that tokenholder voting is required for "any changes to be implemented" within a DAO).

22. Because tokenholders must approve *all* DAO actions, DAOs generally move at a slower pace than traditional business organizations. As some have noted, there is a tradeoff between eliminating agency problems and increasing coordination problems. *See* Grace Rebecca Rachmany, *DAOs Will Never Govern the World (at This Pace)*, COINDESK (Sept. 14, 2021, 3:58 AM), https://www.coindesk.com/tech/2020/09/21/daos-will-never-govern-the-world-at-this-pace/.

23. *See* HOLGER SPAMANN, CORPORATIONS 27–32 (2018). In corporate democracy on the other hand, shareholders only retain *some* control rights. For instance, shareholders of the selling company generally vote to approve mergers, and shareholders retain control over the board through elections. *See id.* at 33–56.

decisions on behalf of the shareholders.[24] There is a resulting risk that the board may use this power to serve its own interests rather than the shareholders' interests.[25] This fundamental principal-agent problem is the basis for fiduciary duties in traditional corporate law.[26] These duties obligate the agents to act "loyally for the principal's benefit in all matters connected with the agency relationship."[27]

Due to their directly democratic governance structure, DAOs do not suffer from the same severity of agency problems as corporations. That said, the directly democratic governance structure of DAOs alone does not completely eliminate agency problems in DAO governance. Because DAOs generally follow a "one token, one vote" rule,[28] agency problems naturally arise when a tokenholder owns enough tokens—and corresponding voting power—to control any given DAO proposal.[29] Agency problems also surface in a DAO when tokenholders assign their voting power to a delegate. Most important, traditional principal-agent problems are resurrected in a DAO if a DAO structurally centralizes power in any type of governance board. Agency problems exist in DAOs in each of these three situations. Thus, even though DAOs are directly democratic business organizations, they still suffer from agency problems.

B. DAOs Run on Blockchains

DAOs run on decentralized blockchain networks.[30] A blockchain is an "immutable digital ledger system[]" that is "implemented in a

24. *See id.*
25. *See id.*
26. *See id.*
27. RESTATEMENT (THIRD) OF AGENCY § 8.01 (AM. L. INST. 2006).
28. *See* Vitalik Buterin, *Moving Beyond Coin Voting Governance*, VITALIK.CA (Aug. 16, 2021), https://vitalik.ca/general/2021/08/16/voting3.html ("Small groups of wealthy participants ('whales') are better at successfully executing decisions than large groups of small-holders."); *see also* Dionysis Zindros, *The Illusion of Blockchain Democracy: One Coin Equals One Vote*, NESTA (Sept. 14, 2020), https://www.nesta.org.uk/report/illusion-blockchain-democracy-one-coin-equals-one-vote/.
29. *See* STEPHEN M. BAINBRIDGE, MERGERS AND ACQUISITIONS 11 (3d ed. 2012) (citing ADOLF A. BERLE, JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY (1932)). For a recent example of this type of dominant control in a DAO, see Edward Ongweso, Jr., *Democratic DAO Suffers Coup, New Leader Steals Everything*, VICE (Feb. 15, 2022, 10:43 AM), https://www.vice.com/en/article/xgd5wq/democratic-dao-suffers-coup-new-leader-steals-everything.
30. *See* ETHEREUM.ORG, *supra* note 1.

distributed fashion . . . and usually without a central authority."[31] Most DAOs run on the Ethereum blockchain.[32] Ethereum is not "just a medium of exchange or a store of value[:]"[33] it is a decentralized computer.[34] Like DAOs, Ethereum "isn't operated or managed by any centralized entity—instead, it's managed by" its tokenholders.[35] The Ethereum blockchain is about much more than just "digital money."[36] Indeed, the digital money acts only as the reward to those actors that contribute to the proof-of-stake consensus protocol.[37] And this consensus protocol is fundamental to securing the Ethereum blockchain.[38]

With the Ethereum blockchain providing an immutable infrastructure, smart contracts drive the operations of DAOs.[39] "Smart contract" is a phrase "used to describe computer code that automatically executes all or parts of an agreement" on a blockchain.[40] As Nick Szabo noted long ago, vending machines are a good analog for smart contracts.[41] For instance, a vending machine "takes in coins, and via a simple mechanism" the vending machine "dispense[s] change and product according to the

31. Dylan Yaga, Peter Mell, Nik Roby & Karen Scarfone, *Blockchain Technology Overview*, NAT'L INST. STANDARDS & TECH. (Jan. 2018), https://csrc.nist.gov/CSRC/media/Publications/nistir/8202/draft/documents/nistir8202-draft.pdf. For a free and comprehensive introduction to blockchain technology, *see* Gary Gensler, *Blockchain and Money*, MIT OPENCOURSEWARE, https://ocw.mit.edu/courses/sloan-school-of-management/15-s12-blockchain-and-money-fall-2018/ (last visited Oct. 4, 2022).

32. Mark Sullivan, *What Are Decentralized Autonomous Organizations and Why Should You Care?*, FAST COMPANY (Feb. 21, 2022), https://www.fastcompany.com/90721723/what-are-decentralized-autonomous-organizations-daos-crypto.

33. David Rodeck, *What Is Ethereum? How Does It Work?*, FORBES (May 30, 2022, 6:09 AM), https://www.forbes.com/advisor/investing/what-is-ethereum-ether/.

34. *Id.*

35. *Id.*

36. Tim Roughgarden, *Foundations of Blockchains Lecture #1: Introduction and Overview*, https://timroughgarden.github.io/fob21/l/l1.pdf (last visited Nov. 20, 2022).

37. *See id.* A consensus protocol refers to the "incentives and ideas that allow a network of nodes to agree on the state of a blockchain." *Consensus Mechanisms*, ETHEREUM.ORG (Sept. 29, 2022), https://ethereum.org/en/developers/docs/consensus-mechanisms/. These protocols ensure the "crypto-economic security" of blockchain networks. *Id.*

38. *See* ETHEREUM.ORG, *supra* note 37.

39. *See* ETHEREUM.ORG, *supra* note 1.

40. *See* Stuart D. Levi & Alex B. Lipton, *An Introduction to Smart Contracts and Their Potential and Inherent Limitations*, HARVARD L. SCH. F. ON CORP. GOVERNANCE (May 26, 2018), https://corpgov.law.harvard.edu/2018/05/26/an-introduction-to-smart-contracts-and-their-potential-and-inherent-limitations/.

41. *See* Nick Szabo, *The Idea of Smart Contracts*, https://www.fon.hum.uva.nl/rob/Courses/InformationInSpeech/CDROM/Literature/LOTwinterschool2006/szabo.best.vwh.net/idea.html (last visited Nov. 20, 2022).

displayed price."[42] The vending machine is "a contract with bearer: anybody with coins can participate in an exchange with the vendor."[43] And the "lockbox and other security mechanisms protect the stored" money and goods from attackers.[44] Like a vending machine, smart contracts "remove the need for intermediaries to handle transactions and, by extension, their associated time delays and fees."[45]

In a DAO, smart contracts are used to execute "decentralized group decision-making."[46] Each DAO's overarching governing smart contract creates the rules for that DAO.[47] And once this governing smart contract is live on a blockchain, it cannot be altered except by an affirmative vote of the tokenholders.[48] If a tokenholder wants a DAO to do *anything* that is not coded into the governing smart contract, the tokenholder must submit a smart contract governance proposal to the other tokenholders for a vote. Governance proposals that achieve "some predefined level of consensus are then accepted and enforced by the rules instantiated within the [DAO's governing] smart contract."[49] Once approved, the smart contract proposal can automatically "execute the agreed upon decisions."[50]

C. DAOs May Aid in the Creation of a New Economic Infrastructure

Blockchain activists and venture capitalists are promoting and envisioning a new economic infrastructure known as "Web3."[51] According to its advocates, Web3 is the third iteration of the internet: "Web1 was read-only (directories), Web2 was read-write

42. *Id.*

43. *Id.*

44. *Id.*

45. *What Are Smart Contracts on Blockchain?*, IBM, https://www.ibm.com/topics/smart-contracts (last visited Nov. 20, 2022).

46. Kerpelman, *supra* note 3.

47. *See* ETHEREUM.ORG, *supra* note 1.

48. *Id.*

49. David Shuttleworth, *What Is a DAO and How Do They Work?*, CONSENSYS (Oct. 7, 2021), https://consensys.net/blog/blockchain-explained/what-is-a-dao-and-how-do-they-work/.

50. *Id.*

51. *See, e.g.*, *Introduction to Web3*, ETHEREUM.ORG (Oct. 3, 2022), https://ethereum.org/en/web3/; Gilad Edelman, *The Father of Web3 Wants You to Trust Less*, WIRED (Nov. 29, 2021, 8:00 AM), https://www.wired.com/story/web3-gavin-wood-interview/; *Web3 Policy Hub*, ANDREESSEN HOROWITZ, https://a16z.com/web3-policy/ (last visited Nov. 20, 2022).

(social media), and Web3 is read-write-*own*."[52] The goal for Web3 proponents is clear: decentralize ownership and control of organizations.[53] DAOs are fundamental to this goal.

As Web3 evangelists contend, DAOs may also transform "work as we know it."[54] DAOs have the potential to create more autonomy for workers: "instead of having one employer and a 40-hour workweek, [workers] might contribute several hours a week to several DAOs."[55] DAOs allow workers to rent their "talent and time, obtain flexibility and earnings, and leverage it to facilitate fractional ownership in the system supported and governed by the community."[56] As workers gain fractional ownership in a DAO by earning tokens, labor interests may become more aligned with capital interests.[57] This symbiotic relationship between labor and capital can speed innovation[58] and increase wealth, morale, and culture in a business.[59]

Perhaps most important, Web3 advocates argue that DAOs have the potential to create a "more socially-conscious [corporate] structure[,] one designed to help individuals everywhere prosper instead of focusing only on the desires of a few large shareholders."[60] The directly democratic governance structure of DAOs "offer[s] the promise of enabling a focus on community, rather than just profit . . . ."[61] Because DAOs are governed by a community of tokenholders instead of a board of directors and

52. *See* Steve Glaveski, *How DAOs Could Change the Way We Work*, HARVARD BUS. REV. (Apr. 7, 2022), https://hbr.org/2022/04/how-daos-could-change-the-way-we-work (quoting Chris Dixon (@cdixon), TWITTER (Nov. 11, 2021, 10:55 PM), https://twitter.com/cdixon/status/1459036992050716697?lang=en (emphasis added)).

53. *See, e.g.*, Bernard Marr, *What is Web3 All About? An Easy Explanation with Examples*, FORBES (Jan. 24, 2022, 12:33 AM) https://www.forbes.com/sites/bernardmarr/2022/01/24/what-is-web3-all-about-an-easy-explanation-with-examples/?sh=1f9966122554; Gaur & Natrajan, *supra* note 16; *see also* Jaimee Francis, *Web 3.0: The Goals and Implications of a Decentralized Internet*, JURIST (Nov. 11, 2021, 12:57 PM), https://www.jurist.org/features/2021/11/11/web-3-0-the-goals-and-implications-of-a-decentralized-internet/.

54. *See* Glaveski, *supra* note 52.

55. *Id.*

56. *See* Gaur & Natrajan, *supra* note 16.

57. *See* Schecter, *supra* note 14.

58. *See* GARTNER RSCH. & DEV. LEADERSHIP COUNCIL, ACCELERATING SPEED TO MARKET 5 (2019).

59. *See Employee Stock Ownership: Increase Wealth, Morale and Culture*, AYCO PERS. FIN. MGMT. (Nov. 16, 2021), https://www.ayco.com/insights/articles/build-wealth-morale-and-culture-through-employee-stock-ownership.html (last visited Nov. 20, 2022).

60. *See* Llyr, *supra* note 17.

61. *See id.*

executives, DAOs may transform "corporate-community relations from antagonistic to harmonious in nature . . . ."[62] DAOs are poised to offer an alluring shift to decentralization. But for DAOs to effectuate meaningful decentralization of our economic infrastructure, they need to scale as a type of business organization.

II. THE CURRENT STATE OF FIDUCIARY DUTIES IN DAOS

Understanding the current state of fiduciary duties in DAOs requires a brief survey of the various legal forms a DAO may take.[63] Currently, creators of a DAO have three options[64] for legal entity formation: (1) ignore legal entity formation and become a partnership by default; (2) form a DAO LLC in either Wyoming or Tennessee; or (3) form a Wrapped DAO[65] in any jurisdiction that allows formation of an LLC. These three legal entities are essential to understanding the current state of fiduciary duties in DAOs because the choice of legal entity determines the nature of the fiduciary duties tokenholders owe each other. As a result, this section will analyze each of these three legal entities along with the corresponding fiduciary duties they create.

A. General Partnership

First, if creators of a DAO ignore legal entity formation, the DAO will most likely be a general partnership by default. DAOs are almost always an "association of two or more persons to carry on as co-owners a business for profit."[66] So, under the Uniform Partnership Act, DAOs that have more than one tokenholder and

62. Barnali Choudhury, *Aligning Corporate and Community Interests: From Abominable to Symbiotic*, 2014 BYU L. REV. 257, 308 (2014).

63. This survey is necessary because of the internal affairs doctrine. This doctrine holds "that corporate governance matters are controlled by the law of the state of incorporation." BAINBRIDGE, *supra* note 29, at 5.

64. This Note focuses on state incorporation of a DAO as a business organization. But it is worth noting that some DAOs are being structured as "Purpose Trust[s] under Guernsey law." *See Legal Framework for Non-U.S. Trusts in Decentralized Autonomous Organizations*, DYDX FOUND. (Mar. 15, 2022), https://dydx.foundation/blog/en/legal-framework-non-us-trusts-in-daos (last visited Oct. 6, 2022).

65. *See* OPENLAW, *The Era of Legally Compliant DAOs*, MEDIUM (June 26, 2019), https://medium.com/@OpenLawOfficial/the-era-of-legally-compliant-daos-491edf88fed0 (last visited Oct. 6, 2022).

66. *See* UNIF. P'SHIP ACT § 202 (NAT'L CONF. OF COMM'RS ON UNIF. STATE LAWS 1997). As an aside, if a DAO was not designed to generate profits (i.e., a charitable DAO), then that DAO may not be deemed a general partnership by default.

are not otherwise incorporated as legal entities will presumably be deemed a general partnership.[67] In a general partnership, partners owe each other the fiduciary duties of loyalty and care.[68] Thus, if DAO creators ignore legal entity formation, then *all* tokenholders almost certainly will owe both the duty of care and the duty of loyalty.[69]

B. DAO LLC

The second legal entity option available to creators of a DAO is the "DAO LLC" entity offered by Wyoming and Tennessee. Under both Wyoming and Tennessee's DAO LLC statutes, the default rule is that tokenholders owe *zero* fiduciary duties to one another.[70] So, if DAO creators form a DAO LLC in Wyoming or Tennessee, and the DAO's operating agreement does not integrate fiduciary duties,[71] then tokenholders will not owe fiduciary duties to one another or the DAO generally. Despite the default zero-fiduciary-

67. Indeed, this point is not completely settled. *See* Alison Frankel, *How Can Insiders Sue an Amorphous Crypto Collective? They Can't, Say bZx Defendants*, REUTERS (July 20, 2022, 5:01 PM), https://www.reuters.com/legal/transactional/how-can-insiders-sue-an-amorphous-crypto-collective-they-cant-say-bzx-defendants-2022-07-20/ (last visited Nov. 20, 2022) (highlighting a lawsuit wherein class-action plaintiffs argue that a DAO is a general partnership). That said, the presumption of a general partnership is viewed by policymakers and advocates as strong. *See, e.g.*, Stuart D. Levi & Anita Oh, *Putative Class Action Lawsuit Alleges DAO Members are Jointly and Severally Liable for a Cryptocurrency Hack*, SKADDEN (May 24, 2022), https://www.skadden.com/insights/publications/2022/05/putative-class-action-lawsuit-alleges-dao-members (last visited Nov. 20, 2022) (noting that Wyoming adopted its DAO LLC law to address the general partnership concern); *see also* OPENLAW, *supra* note 65 (noting that many courts and lawyers "describe the relationship between members of a DAO" as the default general partnership).

68. UNIF. P'SHIP ACT § 404 (NAT'L CONF. OF COMM'RS ON UNIF. STATE LAWS 1997).

69. This Note focuses on fiduciary duties, but a partnership could be very problematic for a DAO for another reason: namely, there is *no* limitation of liability in a partnership. *See* SPAMANN, *supra* note 23, at 1–8. For an example of a lawsuit where plaintiffs argue that all tokenholders are jointly and severally liable for the hacking of a DAO, see Levi & Oh, *supra* note 67.

70. WYO. STAT. ANN. § 17-31-110 ("[N]o member of a decentralized autonomous organization shall have any fiduciary duty to the organization or any member except that the members shall be subject to the implied contractual covenant of good faith and fair dealing."); TENN. CODE ANN. § 48-250-109 ("Unless otherwise provided for in the articles of organization or operating agreement, a member of a decentralized organization does not have a fiduciary duty to the organization or another member; except, that the member is subject to the implied contractual covenant of good faith and fair dealing.").

71. Neither Wyoming's nor Tennessee's DAO LLC laws prohibit the *integration* of fiduciary duties into a DAO's operating agreement. *See* WYO. STAT. ANN. § 17-31-110; TENN. CODE ANN. § 48-250-109. So, if a DAO wanted to ensure its tokenholders were protected it could integrate some, or all, fiduciary duties into its operating agreement.

duty rule, both Wyoming's and Tennessee's DAO LLC laws do not allow DAOs to waive the implied contractual covenant of good faith and fair dealing.[72]

C. LLC (Wrapped-DAO)

The third type of legal entity available to creators of a DAO is the Wrapped-DAO.[73] This type of legal entity was popularized by OpenLaw and its founder Aaron Wright.[74] A Wrapped-DAO is treated like any other LLC for fiduciary duty purposes. Most important, the default rule under Delaware law is that LLC members and managers owe full fiduciary duties to one another.[75] This differs from the default rule in Wyoming's and Tennessee's DAO LLC laws. Even so, Delaware allows LLCs to affirmatively waive fiduciary duties in their operating agreements.[76] So, if creators of a DAO form a Wrapped-DAO, they may affirmatively waive all fiduciary duties in the DAO's operating agreement. Delaware does not allow LLCs to waive the implied contractual covenant of good faith and fair dealing.[77]

As explained in the three sections above, the type of legal entity that creators of a DAO choose (or don't choose) precipitates the fiduciary duties that tokenholders will owe each other. When creators of a DAO choose not to incorporate, tokenholders owe full fiduciary duties to each other under the default general partnership laws. When creators of a DAO form a DAO LLC in Wyoming or Tennessee, tokenholders will not owe fiduciary duties to each other unless the DAO's operating agreement affirmatively integrates fiduciary duties. And when creators of a DAO form a Wrapped-DAO, the creators may completely waive fiduciary duties in the DAO's operating agreement. As of yet, no DAO in any jurisdiction is able to waive the implied covenant of good faith and fair dealing.

72. *See* WYO. STAT. ANN. § 17-31-110; TENN. CODE ANN. § 48-250-109.
73. *See* OPENLAW, *supra* note 65.
74. *See id.*
75. *See* DEL. CODE. ANN. tit. 6, § 18-1104.
76. *See id.* § 18-1101.
77. *Id.*

III. PROBLEMS WITH THE CURRENT STATE OF FIDUCIARY DUTIES IN DAOS

Currently, creators of DAOs can eliminate *all* fiduciary obligations between tokenholders. This is problematic because fiduciary duties *protect* investors from self-dealing agents by offering a solution to the principal-agent problem.[78] "The classic principal-agent problem arises because the principal cannot be sure that the agent will act in its best interests . . . ."[79] In traditional corporations, the principal-agent problem surfaces when shareholders (principals) delegate control to the board of directors (agents). With this delegated power, the directors can act in their own best interests rather than the shareholders' best interests. "Self-dealing" occurs when a director promotes its own interests ahead of the shareholders'.[80]

State corporate law protects shareholders from self-dealing, and related agency problems, by imposing fiduciary duties on the board of directors.[81] These duties have two standards associated with them: (1) the standard of fiduciary conduct and (2) the standard of judicial review.[82] "The standard of conduct describes what directors are expected to do and is defined by the content of the duties of loyalty and care. The standard of review is the test that a court applies when evaluating whether directors have met the standard of conduct."[83] In tandem, these standards require the agent to "refrain from self-interested behavior that wrongs" the principal.[84] Fiduciary duties are an efficient solution to agency problems because the *ex post* standards of review and principles

78. *See* SPAMANN, *supra* note 23, at 27–32.

79. Brianne J. Gorod, *Defending Executive Nondefense and the Principal-Agent Problem*, 106 NW. U. L. REV. 1201, 1226 (2012).

80. *See* SPAMANN, *supra* note 23, at 57–81.

81. *Id.* at 27–32.

82. *See* William T. Allen, Jack B. Jacobs, & Leo E. Strine, Jr., *Realigning the Standard of Review of Director Due Care with Delaware Public Policy: A Critique of Van Gorkom and its Progeny as a Standard of Review Problem*, 96 NW. U. L. REV. 449, 451–52 (2002).

83. *In re* Trados Inc. S'holder Litig., 73 A.3d 17, 35–36 (Del. Ch. 2013).

84. D. Gordon Smith, *The Critical Resource Theory of Fiduciary Duty*, 55 VAND. L. REV. 1399, 1410 (2002); *see also* Matthew Jennejohn & D. Gordon Smith, *Delaware's Frontier*, 24 J. Bus. L. 791, 796 (2022) (describing fiduciary duties—and the associated standards of review and conduct—as a solution to agency problems).

of equity associated with fiduciary duties limit contracting costs while protecting principals.[85]

Creators of DAOs can eliminate *all* fiduciary duties between tokenholders. This section will illustrate that the elimination of all fiduciary duties in a DAO is problematic. First, this section shows that DAOs suffer from three types of principal-agent problems where agents have power to self-deal. Second, this section explains how DAOs are fertile ground for self-dealing and describes the different types of self-dealing that have occurred, and may occur, within DAOs. Finally, this section concludes by arguing that neither privately ordered governance mechanisms nor the implied contractual covenant of good faith and fair dealing are robust enough to address agency problems, and self-dealing, in DAOs. If tokenholders are not adequately protected from self-dealing, DAOs will not effectively scale as a type of business organization.

A. Agency Problems in DAOs

As directly democratic business organizations, DAOs may not suffer from the same severity of agency problems as traditional business organizations. Even so, agency problems exist in DAOs in at least three situations: (1) when a tokenholder has the voting power necessary to *control* any given governance proposal; (2) when a tokenholder assigns its voting power to a delegate; or (3) when a DAO *centralizes* power in any type of DAO governance board. This section will analyze each of these situations where agency problems arise in DAOs.

First, agency problems arise in DAOs when a tokenholder has the necessary token-weighted voting power to control any given smart contract proposal.[86] In this scenario, the "noncontrolling [tokenholders] can be thought of as the principals and the controlling [tokenholders] as the agents . . . ."[87] Tokenholders can

85. *See* Leo E. Strine, Jr. & J. Travis Laster, *The Siren Song of Unlimited Contractual Freedom* 10–13 (Harvard John M. Olin Ctr. for L., Econ., & Bus., Discussion Paper No. 789, 2014) (declaring that "[a]ll contracts necessarily will be incomplete" and explaining the balance struck by Delaware's system of fiduciary duties by broadly enabling legitimate risk taking while protecting shareholders' interests through fiduciary duties).

86. *See generally* John Armour, Henry Hansmann & Reinier Kraakman, *Agency Problems, Legal Strategies, and Enforcement* (Eur. Corp. Governance Inst., Working Paper No. 135, 2009) (outlining the agency problems that emerge when an agent has sufficient power to defy the will of its principals). Tokenholders with the voting power necessary to control a proposal are known as "controlling tokenholder(s)."

87. *Id.* at 4. *See also* BAINBRIDGE, *supra* note 29, at 119.

gain control in a DAO through two methods: (1) retaining a majority of a DAO's tokens after a DAO's creation or (2) purchasing a majority of a DAO's tokens on secondary markets. Indeed, the transferability of DAO tokens makes it all the more likely that wealthy investors or activists will be able to gain voting control of a DAO. As Vitalik Buterin said, "[t]ransferable governance tokens are all about giving *more* power to 'those who most want to rule.'"[88]

Second, agency problems arise in DAOs when a tokenholder assigns its voting power to a delegate. In a delegation framework, a tokenholder assigns its voting rights to a delegate, and in turn, that delegate is meant to vote according to the delegating tokenholder's interests.[89] In this scenario, the delegating tokenholder can be thought of as the principal and the delegate as the agent. This principal-agent problem is much like the principal-agent problem that currently exists in corporate law, as the delegate is a direct agent of the delegating tokenholder. Like a director on a corporate board, the delegate has delegated power and may use this power to self-deal.

Third, agency problems arise in a DAO if a DAO centralizes governance power in any type of governance board. For instance, the ApeCoin DAO centralizes power in a board.[90] The "purpose of the [ApeCoin] Board is to administer DAO proposals and serve the vision of the [ApeCoin] community."[91] At first glance, it does not seem like the ApeCoin Board has as much power as a traditional corporate board. In contrast to a corporate board, which is broadly tasked with managing the business and affairs of a corporation,[92] the ApeCoin Board generally serves a limited veto role of reviewing proposals that (1) have an unclear cost of implementation, (2) use more than 5% of the DAO treasury, or (3) conflict with another proposal.[93] The Board is also meant to use

88. Vitalik Buterin (@VitalikButerin), TWITTER (July 28, 2022, 11:12 AM), https://twitter.com/VitalikButerin/status/1552703630024867841?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Etweet.

89. *See The LAO: Previewing Delegated Voting*, MEDIUM (Nov. 19, 2019), https://medium.com/ @thelaoofficial/the-lao-previewing-delegated-voting-e0b6241bffbb.

90. *See ApeCoin DAO Governance*, APECOIN, https://apecoin.com/governance (last visited Nov. 20, 2022).

91. *Id.*

92. *See* SPAMANN, *supra* note 23, at 27–32.

93. *See* APECOIN, *supra* note 90.

its power to "serve the vision of the community."[94] ApeCoin's website does not describe this role any further.

Even if a DAO board's power is limited, the creation of any DAO board centralizes control and creates agency problems. With this delegated control, DAO boards can use their power to discriminatorily approve or reject only the proposals that favor their personal interests. Indeed, the creation of any DAO board resurrects the traditional principal-agent problem in DAOs.

B. Self-Dealing in DAOs

Given the potential for agency problems to arise, tokenholders may be harmed by other self-dealing tokenholders. In addition, three characteristics of DAOs make these business organizations fertile ground for self-dealing: (1) low-participation rates, (2) reduced social norms, and (3) code illiteracy. Accordingly, this subsection will discuss the enhanced risks of self-dealing in DAOs and will proceed by providing examples of different kinds of self-dealing in DAOs.

1. DAOs are Fertile Ground for Self-Dealing

To begin with, DAOs are fertile ground for self-dealing because many tokenholders do not actively participate in DAO governance.[95] Across the top three DAO platforms, the average tokenholder participation rate is 16.35%.[96] Low participation rates increase the risk of self-dealing in a DAO because fewer tokenholders will scrutinize governance proposals. And low participation rates create a much greater problem: the lower the participation rate, the easier for a tokenholder to become a controller on any given proposal. For instance, if only 16% of the tokenholders vote on a proposal, and a tokenholder holds 8% of the DAO's tokens, that tokenholder becomes a controlling tokenholder for that proposal. Quorum voting requirements may help to alleviate this

94. *Id.*

95. *See* Faqir-Rhazoui, Yousef, Arroyo, Javier & Samer Hassan, *A Comparative Analysis of the Platforms for Decentralized Autonomous Organizations in the Ethereum Blockchain*, 12 J. INTERNET SERVS. & APPLICATIONS, 9 (2021).

96. *See id. See also* TALLY, https://www.withtally.com/ (last visited Nov. 20, 2022) (tracking tokenholder participation in DAOs across the Ethereum and Polygon blockchains).

low participation problem.[97] Delegation is another potential solution.[98] But the problem remains: the lower the participation rate in a DAO, the easier it becomes for a tokenholder with a relatively modest stake in a DAO to become a controller and self-deal.

DAOs are also fertile ground for self-dealing because tokenholders may not share their real-world identities with other tokenholders. Social norms act as a control on self-dealing in traditional organizations.[99] But this control mechanism is weakened in an internet-native business like a DAO. Indeed, tokenholders may never meet each other in real life or share their true identities.[100] Some tokenholders may choose to only be known by pseudonyms while other tokenholders may remain completely anonymous.[101] When tokenholders do not know the real-world identities of other tokenholders, social norms are not nearly as effective at combatting self-dealing.

Additionally, the lack of real-world tokenholder identity creates the possibility for a "[s]ybil attack"[102] on a DAO. In this type of attack, "[a]n attacker might create numerous anonymous accounts and slowly accumulate governance tokens, while behaving just

97. For instance, Tennessee sets a mandatory quorum requirement. *See* TENN. CODE ANN. § 48-250-110. Similarly, wrapped-DAOs are not subject to mandatory quorum voting requirements, but DAOs may choose to create their own quorum requirements. *See* COINYUPPIE, *Summary of Optional DAOs Voting Mechanisms* (June 2, 2021, 6:27 AM), https://coinyuppie.com/summary-of-optional-daos-voting-mechanisms/.

98. *See DAOs and Democracy: Voting Mechanisms in Web3*, ACCELERATED CAPITAL (July 30, 2021), https://acceleratedcapital.substack.com/p/daos-and-democracy-voting-mechanisms. It bears repeating that a delegation framework may create and exacerbate agency problems in a DAO. These delegates may use their voting power to self-deal.

99. *See* Matthew Jennejohn, *Private Order of Innovation Networks*, 68 STAN. L. REV. 281, 295 (2016) ("Informal governance mechanisms—such as social norms, repeated dealings, or reputational effects—pressure parties to live up to their contractual obligations.").

100. *See* Seth Benton, *DAOs and the Missing Link: Reputation Protocols*, MEDIUM (Sept. 13, 2019), https://medium.com/sourcecred/the-dao-missing-link-reputation-protocols-8e141355cef2; David Kerr & Miles Jennings, *A Legal Framework for Decentralized Autonomous Organizations*, A16Z CRYPTO, https://a16zcrypto.com/wp-content/uploads/2022/06/dao-legal-framework-part-1.pdf(last visited Oct. 6, 2022). It is also important to note that some DAOs *require* tokenholders to share their true identities with each other. *See Membership*, FLAMINGO (Sept. 24, 2020, 3:12 AM), https://docs.flamingodao.xyz/Membership.html. If this requirement is in place, then social norms may play a strong role as a control mechanism.

101. *See* Schecter, *supra* note 14.

102. *See* Sebastian Gajek, *2019 Is the Year of DAOs – Now We Urgently Need Robust Consensus Protocols for the People*, MEDIUM (Apr. 12, 2019), https://medium.com/hackernoon/2019-is-the-year-of-daos-9728618873f5.

like any other holder to avoid suspicion."[103] Once an attacker has attained complete voting control of a DAO, it can readily engage in blatant self-dealing through a "51% attack."[104] Although the blockchain is transparent, a single tokenholder can manipulate others into believing that a DAO's ownership is decentralized when it actually is not.[105]

Aside from low participation and lack of real-world tokenholder identity, another aspect of DAOs makes them fertile ground for self-dealing: code illiteracy. It is safe to assume that not *all* tokenholders in DAOs are completely literate in solidity—the standard language used to code smart contract governance proposals.[106] Tokenholders might vote with their tokens without fully understanding the smart contract governance proposals on which they are voting. Code illiterate tokenholders must rely on the natural language descriptions of smart contracts to understand them.[107] Consequently, an opportunistic tokenholder may write a natural language description of a smart contract proposal that does not align with the smart contract's actual function. Hopefully someone in the community of DAO tokenholders would catch this problem before the proposal is approved. But without fiduciary duties, tokenholder reliance on natural language descriptions of smart contract proposals may be misplaced.

2. Examples of Self-Dealing in DAOs

Low participation rates, reduced social norms, and code illiteracy make it easier for a tokenholder to amass the necessary

103. Pranav Garimidi, Scott Duke Kominers & Tim Roughgarden, *DAO Governance Attacks, and How to Avoid Them*, A16Z CRYPTO (July 28, 2022), https://a16zcrypto.com/dao-governance-attacks-and-how-to-avoid-them/.

104. Vitalik Buterin, *Ethereum Whitepaper*, ETHEREUM.ORG, (Oct. 11, 2022), https://ethereum.org/en/whitepaper/.

105. A sybil attack is not possible in a traditional public corporation because of the securities regulations. *See* Securities Exchange Act of 1934, 15 U.S.C. § 13(d). At the same time, it is worth noting that some DAOs combat the sybil attack by requiring tokenholders to disclose their natural identities to invest in the DAO. *See* FLAMINGO, *supra* note 100.

106. Rough estimates put the total of Solidity developers at around 200,000 globally. *See Ethereum's Ecosystem Estimated at 200,000 Developers with Truffle Seeing 80,000 Downloads a Month*, TRUSTNODES (July 22, 2018, 11:34 AM), https://www.trustnodes.com/2018/07/22/ethereums-ecosystem-estimated-200000-developers-truffle-seeing-80000-downloads-month.

107. For an example of a natural language description of a smart contract proposal in a DAO, see *TSP x Nouns: Skateboard Design and Giveaway*, TALLY (Feb. 24, 2022), https://www.withtally.com/governance/eip155:1:0x6f3E6272A167e8AcCb32072d08E0957F9c79223d/proposal/40.

voting power to control any given DAO governance proposal. With this voting power, controlling tokenholders have the ability to self-deal. Self-dealing can take many shapes and forms.[108] But a few concrete examples portray the problem with the current zero-fiduciary-duty regime: (1) freezeout mergers, (2) transfer pricing, (3) token dilution, (4) coercive defensive measures, and (5) unfair sales and break-ups.

First, a controller can self-deal through a freezeout merger executed by a smart contract governance proposal. In a DAO freezeout scenario, the controller "buys out the minority"[109] tokenholders and forces the sale of the entire DAO to its own entity.[110] A controller can self-deal in a freezeout by cashing out the minority tokenholders at a price that does not accurately represent the value of the DAO.

Second, a controller can self-deal through transfer pricing executed by a smart contract governance proposal.[111] Transfer pricing occurs when "artificially inflated or deflated prices" are used "to shift value from one company to another."[112] In a transfer pricing scheme in a DAO, a controller would write a smart contract proposal that invests the DAO's funds into her own NFT project, cryptocurrency project, DeFi project, or real-world assets at an *unfair price*.

Third, a controller could self-deal through a dilution scheme executed by a smart contract governance proposal.[113] In a DAO dilution scenario, an unfair dilution occurs when a controller discriminatorily issues itself more DAO tokens without providing funds of equal value to the DAO treasury. The discriminatory issuance of additional tokens to the controller dilutes the value for the remaining tokenholders.

Fourth, a controller could self-deal by approving a smart contract governance proposal that acts as a transfer restriction that infringes upon the minority tokenholders' ability to sell their tokens.

108. *See* Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes & Andrei Shliefer, *The Law and Economics of Self-Dealing*, 88 J. FIN. ECON. 430, 430 (2008).

109. Guhan Subramanian, *Fixing Freezeouts*, 115 YALE L.J. 2, 2 (2005).

110. For an illustration of an especially malicious freezeout in a DAO, see Edward Ongweso Jr., *Democratic DAO Suffers Coup, New Leader Steals Everything*, VICE (Feb. 15, 2022, 10:43 AM), https://www.vice.com/en/article/xgd5wq/democratic-dao-suffers-coup-new-leader-steals-everything.

111. *See* SPAMANN, *supra* note 23, at 59.

112. *Id.*

113. *Id.*

An unfair defensive measure occurs when a controller coercively restricts the ability of a tokenholder to sell its DAO token.[114] For instance, a controller could approve a proposal that effectively prohibits the sale of DAO tokens in *any* scenario. Or more subtly, the controller could approve a proposal that does not allow tokenholders to sell DAO tokens below a certain price.

Fifth, a controller could self-deal by selling or breaking up a DAO without focusing on obtaining the *best value* for the minority tokenholders.[115] An unfair sale or break-up might occur when a controller approves a smart contract governance proposal that sells a DAO to a friendly purchaser instead of a purchaser that will provide the greatest value to the minority tokenholders.[116]

Fiduciary standards of conduct and review are strong enough to address all of the above examples of self-dealing.[117] Without fiduciary duties to deter these types of self-dealing, these and other instances of self-dealing may well occur in DAOs. If tokenholders with the ability to control a governance proposal do not owe other tokenholders fiduciary duties, then harmed tokenholders will not be able to rely on a court of equity for an *ex post* fairness review of controller-driven actions. This lack of tokenholder protection stands firmly in the way of scaling DAOs as a type of business organization.

C. The Current State of DAO Governance Cannot Effectively Control Self-Dealing

As depicted above, DAOs are fertile ground for many types of self-dealing. And in the current legal landscape, this self-dealing

114. *See* Unitrin, Inc. v. American General Corp., 651 A.2d 1361, 1367 (Del. 1995). Some DAOs, like Flamingo DAO, have limited sales like this from their genesis. *See Flamingo Units and New Members*, FLAMINGO (Sept. 23, 2020, 9:16 PM), https://docs.flamingodao.xyz/Transfer.html#will-flamingo-units-be-transferrable. (Sept. 23, 2020, 9:16 PM). This is not the type of self-dealing concern addressed here. Rather, this scenario would have a controller limit alienability of tokens after tokenholders purchased the tokens with expectation of complete alienability.

115. For an example of a DAO merger, see *XDai Wants a Gnosis Merger to Stay Relevant, but Some Tokenholders Are Crying Foul*, COINDESK (Nov. 12, 2021, 3:47 PM), https://www.coindesk.com/tech/2021/11/12/xdai-wants-a-gnosis-merger-to-stay-relevant-but-some-tokenholders-are-crying-foul/.

116. *See* Matthew D. Cain, Sean J. Griffith, Robert J. Jackson Jr., & Steven Davidoff Solomon, *Does Revlon Really Matter? An Empirical and Theoretical Study*, 108 CALIF. L. REV. 1683, 1697 (2020).

117. *See infra* Section IV.A.

is not controlled by fiduciary obligations between tokenholders.[118] Rather, DAOs rely on two other constraints on self-dealing: (1) private governance mechanisms and (2) the implied covenant of good faith and fair dealing. Even in tandem, these two constraints are not strong enough to combat self-dealing in DAOs. As shown below, earnest tokenholders are currently not protected from self-dealing tokenholders.

1. Private Controls Cannot Effectively Combat Self-Dealing

DAOs may utilize privately ordered governance mechanisms to attempt to prevent self-dealing. These private governance mechanisms are generally implemented through smart contracts.[119] Professor Aaron Wright made the following observations about smart contracts as a private governance mechanism:

> Smart contracts offer further opportunities to structure organizations in a more deterministic manner, with code detailing the rules *ex ante* for cooperation among a variety of constituents. A blockchain's rigidity acts as a layer of control. By fostering a substitution of *ex ante* governance in this way, parties will have less need to invest in monitoring and enforcement. With less possibility for parties to act in their own self-interest, blockchain-based governance can decrease uncertainty and increase trust within an organization.[120]

Although smart contracts can be utilized to create mechanisms intended to prevent future self-dealing, the private governance mechanisms that are built on smart contracts are not capable of eliminating or completely addressing self-dealing in DAOs. Some of the most notable privately ordered governance mechanisms built on smart contracts are (1) "rage quitting," (2) veto powers, and (3) decreasing token liquidity.

First, "rage quitting" is a private governance mechanism heralded as a method of tokenholder protection in DAOs.[121] This functionality

118. *See supra* Part III.

119. *See* Aaron Wright, *The Rise of Decentralized Autonomous Organizations*, 4.2 STAN. J. BLOCKCHAIN L. & POL'Y 152, 163 (2021).

120. *Id.*

121. *See, e.g.*, Ven Gist, *Moloch Primer for Humans*, MEDIUM (Oct. 2, 2019), https://medium.com/odyssy/moloch-primer-for-humans-9e6a4f258f78 (describing rage quitting as the "magic sauce"); *Rage Quit*, TRIBUTEDAO, https://tributedao.com/docs/contracts/adapters/exiting/rage-quit-adapter/ (last visited Oct. 12, 2022).

allows a tokenholder to leave a DAO at any time with their pro rata share of the DAO's funds.[122] Proponents of a zero-fiduciary-duty regime argue that the rage quit functionality "protects members from governance capture by an adverse majority and obviates traditional legal models for minority protection such as fiduciary duties."[123] But rage quitting is not enough to protect tokenholders from self-dealing. For instance, a tokenholder could self-deal *before* the other tokenholders have the chance to rage quit. This timing problem may create a scenario where there are no funds to rage quit with because the self-dealing has already occurred. Surely, rage quitting provisions help to deter and prevent some forms of self-dealing. But because of this timing problem, the rage quit functionality alone is not strong enough to protect tokenholders from all self-dealing.

Second, "veto powers" are governance mechanisms that "allow a vote to be delayed for some period of time to alert inactive voters about a potentially dangerous proposal."[124] Some DAOs place veto powers in all tokenholders while others place veto powers in a centralized board.[125] Veto powers cannot prevent all self-dealing, however. For instance, if veto powers are placed in *all* tokenholders, then the controlling tokenholder can simply wait out the veto period and approve the proposal.[126] On the other hand, if veto powers are placed in a centralized board, then the centralized board still has the ability to self-deal—defeating the democratic purpose of a DAO.

Third, DAOs can decrease token liquidity "to make it harder to acquire the voting power needed for" self-dealing.[127] DAOs can reduce token liquidity by incentivizing staking: a process wherein

122. *See* Adam J. Kerpelman, *Rage Quit* *Exit Rights* *and Real Skin in the Game.* , DAOHAUS (Sept. 17, 2020), https://daohaus.substack.com/p/rage-quit-exit-rights-and-real-skin?utm_source=url.

123. Gabriel Shapiro, Peter 'pet3rpan' & Ameen Soleimani, *MCV Whitepaper*, GITHUB (Feb. 17, 2020), https://github.com/metacartel/MCV/blob/master/MCV-Whitepaper.md.

124. *See* Garimidi et al., *supra* note 103.

125. *See* APECOIN, *supra* note 90.

126. A veto mechanism might be designed that *excludes* the creator of the governance proposal. In theory this governance mechanism would be quite effective as the controller's proposals would be subject to approval by the minority tokenholders. But in actuality, it would be easy for a controller to circumvent this veto mechanism by shrouding its token holdings in multiple wallets—much like the sybil attack addressed in Section IV.B.i of this Note.

127. *See* Garimidi et al., *supra* note 103.

a tokenholder is rewarded for holding a DAO token.[128] Staking is likely to increase the cost of acquiring voting power in DAOs, but staking rewards may need to be *inefficiently* high to effectively deter a self-dealer from acquiring voting power. Indeed, any DAO funds expended on staking rewards cannot be expended on furthering the purpose of the DAO.

Similarly, DAOs can reduce token liquidity by erecting token transferability restrictions.[129] These transfer restrictions prevent the sale of a DAO token without the approval of the DAO's non-transferring tokenholders. Through this mechanism, the non-transferring tokenholders can vet each new entrant to the DAO. Additionally, the non-transferring tokenholders have visibility into the portion of the DAO's tokens that are held by any given tokenholder. In this way, these transfer restrictions allow a DAO to maintain control over its members in its ownership structure and prevent a sybil attack.

Surely, transfer restrictions are a robust constraint on self-dealing. [130] But the cost in administering these transfer restrictions may keep a DAO prohibitively small. Indeed, some now-existing DAOs with transfer restrictions cap membership around 100 tokenholders.[131] Perhaps a DAO could efficiently implement transfer restrictions in a larger DAO. Even so, if tokenholders must spend time administering transfer restrictions, they will have less time to further the purpose of the DAO. Given that participation in DAO governance is already low, adding more governance proposals is unlikely to increase participation.[132] Thus, transfer restrictions are ultimately a costly private governance mechanism. And if DAO tokenholders do not effectively monitor

128. "Staking is a way" of providing "rewards for holding certain cryptocurrencies." *What is Staking?*, COINBASE, https://www.coinbase.com/learn/crypto-basics/what-is-staking (last visited Sept. 9, 2022).

129. *See* Garimidi et al., *supra* note 103.

130. Indeed, transfer restrictions are used in startups to maintain tight control over an ownership structure. *See* Andrew Shawber & Stephen Ferruolo, *Should We Include Transfer Restrictions in Our Bylaws?*, STARTUPPERCOLATOR, https://www.startuppercolator.com/should-we-include-transfer-restrictions-in-our-bylaws/ (last visited Nov. 20, 2022).

131. *See, e.g.*, FLAMINGO, *supra* note 100; *Membership*, THE LAO (Mar. 9, 2021, 6:05 PM), https://docs.thelao.io/Membership.html.

132. *See infra* Section IV.B.

these transfer restrictions,[133] the restrictions will have little ability to prevent self-dealing.

Although privately ordered government mechanisms are effective, they are almost certainly incapable of completely combatting self-dealing and protecting tokenholders in DAOs. As Vice Chancellor Laster noted, "it is physically impossible at the outset . . . to foresee all future states of the world and contract for them."[134] This sentiment also rings true when considering privately ordered DAO governance mechanisms. It is almost certainly inefficient, and probably impossible, to foresee and contract around all forms of self-dealing in DAOs by creating private governance mechanisms.

2. The Implied Covenant Cannot Effectively Combat Self-Dealing

Aside from the *ex ante* protection from self-dealing that private governance mechanisms *may* offer some tokenholders, nearly all DAO tokenholders are offered limited *ex post* protection from self-dealing via the implied contractual covenant of good faith and fair dealing.[135] As this subsection will show, the implied covenant is not strong enough to prevent self-dealing in DAOs,[136] nor is the implied covenant strong enough to provide relief to harmed tokenholders in a court of equity. Indeed, the implied covenant is not a fiduciary duty, rather the implied covenant is a contract law doctrine.[137]

There is no "clear consensus on what [the implied covenant of good faith and fair dealing] is."[138] But there is a clear consensus on what the implied covenant is not: "the implied covenant is *not* a

133. As noted earlier, participation rates in DAOs are low. *See supra* Section III.B. In turn, participation rates in proposals regarding token transfer may also be correspondingly low.

134. Stanford Law School, *Luncheon Keynote Address w/Vice Chancellor J. Travis Laster, Delaware Court of Chancery*, YOUTUBE, at 09:46 (Mar. 14, 2014), https://www.youtube.com/watch?v=yhoiLbGIoWk.

135. *See supra* Part II (Wyoming DAOs, Tennessee DAOs, and Delaware LLCs (wrapped DAOs) cannot waive the implied contractual covenant of good faith and fair dealing.).

136. *See generally* Mitu Gulati & Mark Weidemaier, *Clauses & Controversies, Ep 53 ft. Tess Wilkinson-Ryan and David Hoffman*, https://podcasts.apple.com/us/podcast/ep-53-ft-tess-wilkinson-ryan-and-david-hoffman/id1528208049?i=1000536014355 (discussing the inability of the implied covenant to effectively prevent self-dealing).

137. *See* Mohsen Manesh, *Express Contract Terms and the Implied Contractual Covenant of Delaware Law*, 38 DEL. J. CORP. L. 1, 1 (2013).

138. Harold Dubroff, *The Implied Covenant of Good Faith in Contract Interpretation and Gap-Filling: Reviling A Revered Relic*, 80 ST. JOHN'S L. REV. 559, 561 (2006).

means to re-write agreements."[139] The implied covenant is *not* a standard of conduct or review associated with fiduciary duties. Rather, "the implied obligation of good faith and fair dealing requires loyalty to the other contracting party *only to the extent* that the terms of the contractual relationship reasonably contemplate the actions in question."[140] Consequently, the implied covenant is only implicated if an express contract term addresses a course of action.[141]

Furthermore, under traditional Delaware corporate law, "[t]he implied covenant is a backstop and 'requires "a party in a contractual relationship to refrain from arbitrary or unreasonable conduct which has the effect of preventing the other party to the contract from receiving the fruits" of the bargain.'"[142] Delaware courts "cannot use an implied covenant to re-write [an] agreement between the parties and should 'be most chary about implying a contractual protection when the contract could easily have been drafted to expressly provide for it.'"[143] Along the same lines, Delaware courts have repeated the mantra that a party "cannot use the implied covenant of good faith and fair dealing to avoid the consequences of the plain language of the contract."[144]

Even under Wyoming and Tennessee contract law, the implied covenant is not strong enough to deter and combat self-dealing. Under Wyoming law, the implied covenant only "requires that a party's actions be consistent with the agreed common purpose and justified expectations of the other party," and Wyoming courts will not construe the implied covenant "to establish new, independent rights or duties not agreed upon by the parties."[145] Similarly, under Tennessee law, the implied covenant does not "create new contractual rights or obligations, nor can it be used to

139. Airborne Health, Inc. v. Squid Soap, LP, 984 A.2d 126, 146 (Del. Ch. 2009) (emphasis added).

140. *See* Smith, *supra* note 84, at 1409–10 (emphasis added).

141. *See id*.

142. All. Data Sys. Corp. v. Blackstone Cap. Partners V L.P., 963 A.2d 746, 770 (Del. Ch. 2009) (quoting Dunlap v. State Farm Fire & Cas. Co., 878 A.2d 434, 442 (Del. 2005)).

143. Oxbow Carbon & Minerals Holdings, Inc. v. Crestview-Oxbow Acquisition, LLC, 202 A.3d 482, 507 (Del. 2019) (quoting Nationwide Emerging Managers, LLC v. Northpointe Holdings, LLC, 112 A.3d 878, 897 (Del. 2015)).

144. Allied Cap. Corp. v. GC-Sun Holdings, L.P., 910 A.2d 1020, 1035 (Del. Ch. 2006).

145. Ultra Res., Inc. v. Hartman, 226 P.3d 889, 920 (Wyo. 2010) (quoting Whitlock Constr., Inc. v. S. Big Horn Cnty. Water Supply Joint Powers Bd., 41 P.3d 1261, 1267 (Wyo. 2002)).

circumvent or alter the specific terms of the parties' agreement."[146] Even more, it is hornbook law that a "majority of courts declined to find a breach of the implied covenant of good faith and fair dealing absent breach of *an express term* of the contract."[147]

DAO operating agreements are natural language contracts that govern DAOs at a higher level than their governing smart contracts.[148] And when a DAO either (1) chooses to not integrate fiduciary duties or (2) waive all fiduciary duties, then the DAO and its tokenholders explicitly agree that they will not owe fiduciary duties to one another. So, the lack of fiduciary duty integration, or a similar waiver, means that tokenholders are expressly contracting away their rights to bring fiduciary duty lawsuits against self-dealing tokenholders. To be clear, DAO tokenholders should not expect courts to treat the implied covenant like a fiduciary duty if DAO operating agreements do not integrate fiduciary duties.

As Chief Justice Strine and Vice Chancellor Laster noted, the implied contractual covenant of good faith and fair dealing

> is far different from the use of good faith by cases in equity addressing the duties of fiduciaries. In that contractual context, good faith is a *confined* concept dealing with the requirement that a party not take action to defeat the expectations clearly implied by the explicit terms of the agreement. In the corporate fiduciary context, good faith is the state of mind of a loyal fiduciary bound to advance the best interests of the stockholders.[149]

As noted above, fiduciary duties are all that the implied covenant is not. Fiduciary duties focus on the "state of mind of a loyal fiduciary,"[150] whereas the implied covenant focuses only on the "explicit terms"[151] of the contract. Fiduciary duties are flexible, relatively predictable, and time-tested controls on self-dealing—the implied covenant is not. Tokenholders should not take comfort in the unpredictable and limited protection from self-dealing that the implied covenant provides.

146. Dick Broad. Co. of Tennessee v. Oak Ridge FM, Inc., 395 S.W.3d 653, 666 (Tenn. 2013) (quoting Lamar Advertising Company v. By-Pass Partners 313 S.W.3d 779, 791 (Tenn. Ct. App. 2009)).

147. RICHARD A. LORD, 23 WILLISTON ON CONTRACTS § 63:22 (4th ed.) (emphasis added).

148. *See supra* Part II.

149. Strine & Laster, *supra* note 85, at 27–28 (emphasis added).

150. *Id.* at 28.

151. *Id.* at 27.

IV. THE SOLUTION: FIDUCIARY DUTIES TAILORED FOR DAOS

Given the insufficiency of private governance mechanisms and the implied covenant of good faith and fair dealing to curb self-dealing by opportunistic tokenholders, this Note proposes a tailored fiduciary duty system that will help DAOs scale while preserving their directly democratic structure and protecting tokenholders from self-dealing. In this tailored fiduciary duty system, creators of DAOs would be able to waive two fiduciary obligations in their operating agreements: (1) the duty of care and (2) the corporate opportunity doctrine. Conversely, creators of DAOs would *not* be allowed to waive the duty of loyalty and a portion of the associated duty to act in good faith.

This section argues that the proposed fiduciary duty system would help DAOs in their quest to scale as a type of business organization. First, this tailored fiduciary duty system strikes a balance between protecting investors from self-dealing and incentivizing innovation by requiring only the fiduciary duties that are essential to prevent self-dealing. Second, this system would increase predictability for investors because fiduciary duties are more predictable than the implied covenant. With the enhanced investor protections and predictability that comes with this tailored fiduciary system, investors would be more likely to deploy their capital into DAOs. Consequently, DAOs would be better able to scale as a type of business organization.

A. Limited, Mandatory Fiduciary Duties Prevent Self-Dealing Without Stifling Innovation

To protect tokenholders from opportunistic self-dealing on the one hand while encouraging legitimate risk taking on the other, DAOs should be subject to only a limited set of fiduciary duties. Indeed, the full gamut of fiduciary duties may prevent DAOs from scaling as a type of business organization. So, the proposed fiduciary duty system allows creators of DAOs to waive the duty of care along with breaches of the duty of loyalty that are rooted in the corporate opportunity doctrine.

To begin with, the duty of care would require all tokenholders in a DAO to act "with the ordinary care expected of a reasonably

prudent fiduciary."[152] Under this standard of conduct, a tokenholder would be *personally liable* for grossly negligent actions within a DAO.[153] If a tokenholder unjustifiably advocated for a bad business decision or drafted a poor smart contract governance proposal in good faith, then that tokenholder may be personally liable to the other tokenholders for damages. This personal liability may (1) discourage valuable risk-taking inside of a DAO and (2) deter innovators from building in the DAO sandbox. As Chancellor Allen, Justice Jacobs, and Chief Justice Strine wisely observed, "the expected value of a risky business decision may be greater than that of a less risky decision."[154] To protect tokenholder innovation and spur value accretion in DAOs, the tailored fiduciary system would allow creators of DAOs to waive the duty of care.

Similarly, the tailored fiduciary system would permit creators of DAOs to waive a portion of the duty of loyalty: the corporate opportunity doctrine.[155] *Meinhard v. Salmon* is the genesis of the corporate opportunity doctrine.[156] But the Delaware Supreme Court's description in *Guth v. Loft* remains the clearest articulation:

> [I]f there is presented to a corporate officer or director a business opportunity which the corporation is financially able to undertake, is, from its nature, in the line of the corporation's business and is of practical advantage to it, is one in which the corporation has an interest or a reasonable expectancy, and, by embracing the opportunity, the self-interest of the officer or director will be brought into conflict with that of his corporation, the law will not permit him to seize the opportunity for himself.[157]

152. Allen et al., *supra* note 82, at 449.

153. *See* Smith v. Van Gorkom, 488 A.2d 858, 873 (Del. 1985) (citing Aronson v. Lewis, 473 A.2d 805, 812 (Del. 1984)).

154. Allen et al., *supra* note 82, at 455.

155. Corporate opportunity waivers are not new to corporate law. For an analysis of corporate opportunity waivers in traditional corporations, *see* Gabriel Rauterberg & Eric Talley, *Contracting out of the Fiduciary Duty of Loyalty: An Empirical Analysis of Corporate Opportunity Waivers*, 117 COLUM. L. REV. 1075, 1077 (2017).

156. *See* Meinhard v. Salmon, 164 N.E. 545 (N.Y. 1928). Justice Cardozo's language remains the classic description of the corporate opportunity doctrine:

> Many forms of conduct permissible in a workaday world for those acting at arm's length, are forbidden to those bound by fiduciary ties. A trustee is held to something stricter than the morals of the market place. Not honesty alone, but the punctilio of an honor the most sensitive, is then the standard of behavior. As to this there has developed a tradition that is unbending and inveterate.

Id. at 546.

157. Guth v. Loft, Inc., 5 A.2d 503, 511 (Del. 1939).

The corporate opportunity doctrine would almost certainly prevent DAOs from scaling as a type of business organization as it would deter investment in DAOs. For instance, if an investor holds tokens in multiple DAOs, then the corporate opportunity doctrine would require that tokenholder to share opportunities equally with both DAOs. It seems nearly impossible to serve two masters like this, and it would be incredibly difficult for any tokenholder to comply with this scrupulous standard.[158]

Moreover, the corporate opportunity doctrine is problematic for the new market infrastructure that Web3 advocates seek to create. Under a strict application of the doctrine, if a tokenholder works for a DAO, then that tokenholder would be prevented from working for other DAOs that are in a similar line of business. Web3 advocates want to make work "more flexible, fluid, and playful" by allowing workers to "participate in several DAOs" at the same time.[159] The corporate opportunity doctrine stands in the way of this laudable goal. So, the tailored fiduciary system would allow creators of DAOs to completely waive the corporate opportunity doctrine in the DAO operating agreement. This waiver would ensure that investors and workers could participate in multiple DAOs at once.

The duty of care and the corporate opportunity doctrine stand in the way of scaling DAOs as a type of business organization, but DAOs need the remaining portion of the duty of loyalty to protect tokenholders. The remaining portion of the duty of loyalty demands that a tokenholder "act loyally" to the other tokenholders and prevents a tokenholder form engaging in unfair conflicted behavior, otherwise known as self-dealing.[160] This portion of the duty of loyalty would protect tokenholders from unfair (1) freezeouts, (2) transfer pricing, (3) dilution, (4) defensive measures, and (5) sales and break-ups.

First, the duty of loyalty would prevent controlling tokenholders from unfairly cashing out the minority tokenholders in a freezeout merger. To cash out the minority tokenholders, controllers would need to comply with the entire fairness standard by proving that

158. As Jesus Christ noted in his Sermon on the Mount, "No man can serve two masters: for either he will hate the one, and love the other; or else he will hold to the one, and despise the other." *Matthew* 6:24 (King James).

159. *See* Schecter, *supra* note 5.

160. *See* SPAMANN, *supra* note 23, at 57–81.

(1) the price paid was *fair*, and (2) the deal process was *fair*.[161] Controllers could avoid the entire fairness standard of review if they complied with the *Kahn* procedural safeguards.[162] Either way, the duty of loyalty would ensure that minority tokenholders are protected from self-dealing in a freezeout.

Second, the duty of loyalty would prevent controllers from unfairly extracting value from a DAO by standing on both sides of a DAO's transaction. To force the DAO to purchase one of its own assets, a controller would need to comply with the entire fairness standard. Again, this standard requires controllers to prove that the asset purchase or investment was entirely fair.[163] The duty of loyalty would ensure that minority tokenholders would not be harmed by controllers through transfer pricing.

Third, the duty of loyalty would prevent controllers from unfairly diluting the minority tokenholders. To issue more tokens in a DAO, controllers would need to comply with the entire fairness standard.[164] This standard would require a controller to prove that the issuance of additional tokens was entirely fair. If a controller discriminatorily issued itself more tokens—and was unable to prove that its issuance was entirely fair—then the controller would be liable. So, the duty of loyalty would ensure that controllers do not unfairly dilute the minority tokenholders.

Fourth, the duty of loyalty would prevent controllers from creating coercive defensive measures or transfer restrictions. Controllers would need to comply with the standard announced in *Unocal Corp. v. Mesa Petroleum Co.*, 493 A.2d 946 (Del. 1985), when implementing defensive measures in a DAO. This *Unocal* standard

161. *See* Weinberger v. UOP, Inc., 457 A.2d 701 (Del. 1983).

162. *See* Kahn v. M & F Worldwide Corp., 88 A.3d 635 (Del. 2014). To comply with the *Kahn* procedural requirements in a DAO freezeout scenario, a controller would need to receive a *fully informed* and *uncoerced* approval from the majority of the minority tokenholders. In a traditional corporate freezeout, a special committee of independent directors is established to cleanse the merger under the *Kahn* procedural safeguards. *See* Stephen Bainbridge, *Majority-of-the-Minority Voting and Fairness in Freezeout Mergers*, PROFESSORBAINBRIDGE.COM (Feb. 7, 2014), https://www.professorbainbridge.com/professorbainbridgecom/2014/02/majority-of-the-minority-voting-and-fairness-in-freezeout-mergers.html. But a special committee is unnecessary in a DAO due to the DAO's directly democratic governance structure.

163. *See* Sinclair Oil v. Levien, 280 A.2d 717 (Del. 1971).

164. *See In re* Trados Inc. S'holder Litig., 73 A.3d 17, 44 (Del. Ch. 2013) ("Entire fairness, Delaware's most onerous standard, applies when the board labors under actual conflicts of interest. Once entire fairness applies, the defendants must establish 'to the court's satisfaction that the transaction was the product of both fair dealing *and* fair price."' (quoting Cinerama, Inc. v. Technicolor, Inc., 663 A.2d 1156, 1163 (Del. 1995))).

would require controllers to prove that defensive measures were (1) responsive to a *reasonable threat* and (2) *proportional* to that threat.[165] The duty of loyalty would ensure that controllers do not entrench themselves to the detriment of the minority tokenholders.

Fifth, the duty of loyalty would prevent controllers from divesting the assets of a DAO without receiving fair market value for those assets. During a sale of control or a break-up, controllers would need to comply with the doctrine announced in *Revlon, Inc. v. MacAndrews & Forbes Holdings, Inc.*, 506 A.2d 173 (Del. 1986). To comply with its *Revlon* duties, a controller would need to prove that it received the "best value reasonably available" for the minority tokenholders.[166]

To be sure, fiduciary duties have not yet been applied systematically to DAOs. Consequently, some courts may struggle to apply these equitable standards to DAOs.[167] Even so, the equitable standards of review associated with fiduciary duties have proven *flexible* enough to (1) address agency problems across many different types of business organizations[168] and (2) remedy self-dealing in its many forms.[169] Ultimately, the fiduciary duty of loyalty along with its corresponding equitable standards of review would prove flexible enough to address agency problems and remedy self-dealing in DAOs.

Indeed, the described mandatory, yet limited, duty of loyalty would almost certainly protect tokenholders from blatant self-dealing. On top of this protection, tokenholders need a limited version of

165. *See* Unocal Corp. v. Mesa Petroleum Co., 493 A.2d 946 (Del. 1985).

166. *See* Paramount Commc'ns Inc. v. QVC Network Inc., 637 A.2d 34, 44 (Del. 1994). It is important to note that *Revlon* will only be activated in two scenarios: (1) sale of control, and (2) break-up. *See* Martin Lipton, Karessa L. Cain & Kathleen C. Iannone, *Stakeholder Governance and the Fiduciary Duties of Directors*, HARVARD L. SCH. F. ON CORP. GOVERNANCE (Aug. 24, 2019), https://corpgov.law.harvard.edu/2019/08/24/stakeholder-governance-and-the-fiduciary-duties-of-directors/. Thus, the *Revlon* Doctrine will not prevent DAOs from focusing on interests beyond tokenholder value maximization in the day-to-day.

167. This may be especially true when courts are forced to determine the "fair price" of a DAO token as digital assets are generally volatile. *See* Nicole Lapin, *Explaining Crypto's Volatility*, FORBES (Dec. 23, 2021, 6:00 AM), https://www.forbes.com/sites/ nicolelapin/ 2021/12/23/explaining-cryptos-volatility/.

168. Mark J. Loewenstein, *Equity and Corporate Law*, 68 SMU L. REV. 783, 794 (2015) (noting that fiduciary duties and the associated equitable standards have been used to address "alleged misconduct by those who control a business entity, be it a corporation, partnership, or limited-liability company").

169. *See* William T. Allen, Jack B. Jacobs & Leo E. Strine, Jr., *Function Over Form: A Reassessment of Standards of Review in Delaware Corporation Law*, 26 DEL. J. CORP. L. 859, 866 (2001) (noting that the equitable standards of review associated with fiduciary duties are flexible).

the related duty to act in good faith to protect them from subtler self-dealing. The duty to act in good faith prohibits principals from acting (1) in "subjective bad faith" or (2) with "deliberate indifference and inaction in the face of a duty to act."[170] In the tailored fiduciary duty system, DAO creators *will not* be able to waive the "subjective bad faith" component of the duty to act in good faith, but creators of DAOs *will* be able to waive the "deliberate indifference" component of the duty to act in good faith.

In this way, the duty to act in good faith is tailored for DAOs. A limited application of the duty to act in good faith bridges the gap left by the elimination of the duty of care. By holding tokenholders liable for acting in subjective bad faith, the tailored system would address self-dealing tokenholders that attempted to pretend they were only acting carelessly. And most important, because tokenholders *will not* be liable for indifference or inaction, passive investors would be able to join DAOs without fear of violating the duty to act in good faith.

This tailored fiduciary system is certainly stricter than the current zero-fiduciary-duty regime. In turn, some may fear that this tailored system will strain innovation. But this tailored fiduciary duty system is more likely to incentivize innovation by tokenholders than deter it. If DAO tokenholders knew that they would be able to innovate without worry of being "rug pulled"[171] by controlling tokenholders, they would be more likely to innovate in DAOs. Innovating tokenholders would only need to fear being sued for their actions if they self-dealt or subjectively acted in bad faith.

This tailored fiduciary system would efficiently address self-dealing and agency problems in DAOs. But an opponent of this mandatory system might argue that market-based DAO governance would eventually address agency problems in DAOs. Because no provisions in state corporate laws *prevent* DAOs from integrating fiduciary duties into their operating agreements, some may assert that, if tokenholders really care about fiduciary duties, they will demand that DAOs willingly integrate fiduciary duties into their operating agreements. And some may further contend

170. *In re* Walt Disney Co. Derivative Litig., 906 A.2d 27, 62–68 (Del. 2006).

171. *See Rug Pull*, BINANCE ACADEMY, https://academy.binance.com/en/glossary/rug-pull (last visited Nov. 20, 2022).

that the DAOs that willingly integrate fiduciary duties will be more able to attract capital and labor investments.[172]

But this argument is not a compelling solution to self-dealing in DAOs. First, there is little visibility into DAO operating agreements because these contracts are not publicly available. Investors who care about fiduciary duties are not even able to assess the operating agreements that purport to integrate or waive these duties. Without transparent information, the market for DAO governance is inefficient. Second, tokenholders may not fully comprehend fiduciary duties and the protections that they afford. As a result, these tokenholders might mistakenly believe that the implied covenant offers true protection from self-dealing.[173]

In a future where many jurisdictions compete for DAO incorporation business, legislators may naturally "race for the bottom" of corporate governance laws to attract additional business.[174] In this race, both Wyoming and Tennessee have already chosen to set the default to *zero* fiduciary duties.[175] Ultimately, it is the states that should proactively act to safeguard DAO tokenholders from harmful opportunism. If states do not act, the federal government may take the states' DAO entity formation business altogether.[176] States can protect their new DAO entity formation business by adopting a tailored fiduciary system.

Similarly, Web3 advocates should prefer a limited fiduciary duty system for DAOs. If DAO laws do not fully address self-dealing, and tokenholders are repeatedly harmed and left without recourse, regulators are more likely to ardently scrutinize DAOs.[177]

172. *See* James Chen, *Market-Based Corporate Governance System*, INVESTOPEDIA (July 14, 2021), https://www.investopedia.com/terms/m/market-based-corporate-governance.asp (identifying market-based corporate governance systems that rely on investors to demand governance accountability).

173. *See infra* Section IV.C.

174. *See generally* William L. Cary, *Federalism and Corporate Law: Reflections upon Delaware*, 83 YALE L.J. 663 (1974).

175. *See infra* Section III.B.

176. *See Accountable Capitalism Act One-Pager*, ELIZABETH WARREN: U.S. SENATOR FOR MASS., https://www.warren.senate.gov/imo/media/doc/Accountable%20Capitalism%20Act%20One-Pager.pdf (last visited Nov. 20, 2022); *see also* Matthew Yglesias, *Elizabeth Warren Has a Plan to Save Capitalism*, VOX (Aug. 15, 2018, 11:05 AM), https://www.vox.com/2018/8/15/17683022/elizabeth-warren-accountable-capitalism-corporations.

177. *See, e.g.*, Ryan Berkun, *DAOs Should Embrace Regulation Not Fear It*, DEFIANT (Mar. 15, 2022), https://thedefiant.io/daos-should-embrace-regulation-not-fear-it; Michael Bellusci, *SEC's Gary Gensler Sees Plenty of 'Noncompliance' Across Crypto Industry*, COINDESK: BUSINESS (July 19, 2022, 12:22 PM), https://www.coindesk.com/business/2022/07/19/secs-gary-gensler-sees-plenty-of-non-compliance-across-crypto-industry/.

Consequently, harm to DAO tokenholders may also cause regulators to direct additional attention toward the blockchain industry as a whole. If further regulation is viewed negatively for the blockchain industry,[178] Web3 advocates should support a *tailored* fiduciary duty system for DAOs. This system would strike a balance between addressing harmful self-dealing and incentivizing innovation. By striking such a balance, this system would help DAOs scale as a type of business organization.

B. Fiduciary Duties Are More Predictable than the Implied Covenant

In addition to providing more robust protection against self-dealing by opportunistic tokenholders, a tailored fiduciary duty system that enables DAOs to limit fiduciary obligations to certain portions of the duty of loyalty and the associated duty to act in good faith would also help reduce uncertainty into quantifiable risk for potential DAO investors.[179] Currently, tokenholders are only provided the implied covenant of good faith and fair dealing as a shield against self-dealing. This shield is weak and unpredictable when compared to the protection that fiduciary duties offer. So, if tokenholders are provided these fiduciary duties as a stronger, more predictable shield against self-dealing, then investors will be more willing to contribute to DAOs in the first place. As more and more investors contribute to DAOs, they will scale as a type of business organization.

Under the current zero-fiduciary-duty regime, a tokenholder may have the ability to self-deal in a DAO and get away scot-free. Tokenholders and lawyers cannot reliably predict how a court will handle self-dealing relying only on the implied covenant of good faith and fair dealing.[180] Of course, a judge *may* interpret the implied covenant of good faith and fair dealing as a remedy for egregious self-dealing in a DAO. But as Chief Justice Strine and Vice Chancellor Laster argue, if the implied covenant were to take on the role of fiduciary duties, the "detriments" would be "obvious."[181] The application of the implied covenant in contexts

178. *See* ALLEN FARRINGTON & SACHA MEYERS, BITCOIN IS VENICE 193 (2022) (opining that unregulated blockchain assets are more efficient than regulated securities).

179. *See* K. Francis Park & Zur Shapira, *Risk and Uncertainty*, *in* THE PALGRAVE ENCYCLOPEDIA OF STRATEGIC MANAGEMENT 1479 (Mie Augier & David J. Teece eds., 2018).

180. *See* Gulati & Weidemaier, *supra* note 136.

181. Strine & Laster, *supra* note 85, at 28.

better served by fiduciary duty-centered analysis would force investors to become "diligent and expert readers of alternative entity agreements."[182] This increased cost may deter scrupulous investors from investing capital in DAOs. And even if investors spend extensive resources deciphering DAO operating agreements, they still cannot be sure that a fairly predictable *ex post* standard will protect them from self-dealing tokenholders.

Fiduciary duties offer investors what the implied covenant does not: predictability.[183] In a tailored fiduciary system, harmed tokenholders would be able to reliably turn to a court of equity to remedy harmful self-dealing. In turn, tokenholders would be less likely to engage in self-dealing in the first place. Courts have not yet applied the fiduciary duties to tokenholders in a DAO, but the mandatory obligations of the tailored fiduciary system—the duty of loyalty that addresses self-dealing and the requirement to act in subjective good faith—have settled standards from corporate case law that courts can apply to DAOs.[184] Essentially, the fiduciary obligations in the tailored system boil down to two principles: (1) conflicted, controlling tokenholders must deal fairly with the DAO and the other tokenholders or be liable; and (2) tokenholders must act in subjective good faith or be liable. In tandem, these two clear obligations provide a firmer foundation for tokenholder lawsuits than the implied covenant of good faith and fair dealing.

The stripped-down version of the duty of loyalty along with the fundamental portion of the duty to act in good faith would likely increase the predictability of judicial outcomes in tokenholder lawsuits as these fiduciary obligations are more predictable than the implied covenant.[185] Investors "have an obvious financial interest in predictability."[186] If lawyers and investors became better

182. *Id.* at 29.

183. *Id.* at 5 ("The requirement of a non-waivable duty of loyalty . . . would promote investor confidence, create a predictable body of case law, and enable contract drafters to simplify the tangled web of provisions that currently attempts to substitute for a traditional duty-of-loyalty analysis.").

184. During the beginning of a tailored fiduciary duty system, courts may need to draw from case law applying fiduciary duties in the corporate context. But as time passes after the enactment of a tailored fiduciary system, a distinct body of case law surrounding DAOs and the limited fiduciary duties is likely to develop.

185. *See* Michael Despres, *Alternative Entities and Fiduciary Duty Waivers in Delaware*, 2015 BYU L. REV. 1347, 1361 (2015).

186. Andrew W. Lo & A. Craig MacKinlay, *Maximizing Predictability in the Stock and Bond Markets*, 1 MACROECONOMIC DYNAMICS 102, 102 (1997).

able to predict behavior and judicial outcomes in DAOs, investors would be more likely to deploy their capital and labor to DAOs. If more investors contribute to DAOs, DAOs would begin to scale as type of business organization.

CONCLUSION

Under the current zero-fiduciary-duty governance regime, DAO tokenholders are not adequately protected from self-dealing. Neither privately ordered governance mechanisms nor the implied covenant of good faith and fair dealing are strong enough to prevent or remedy all harm to tokenholders that comes from self-dealing. But fiduciary duties are. That said, states should be wary of applying the full gamut of corporate fiduciary duties to DAOs in a skeuomorphic manner. DAOs are unique entities with unique goals. A tailored fiduciary system recognizes this and strikes a balance between addressing agency problems and incentivizing innovation. This system also enhances predictability for investors. States can help DAOs scale as a type of business organization—and preserve control of their new DAO entity formation business—by passing laws that create mandatory, yet limited, fiduciary duty systems for DAOs.