# Is D&O insurance ready for the DAO? Rethinking corporate personality and responsibility

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### Introduction

- 1.1 The Decentralised Autonomous Organisation (**DAO**) has had an undeservingly chequered past. Initially hailed as one of the most significant innovations since the invention of corporate personhood,<sup>2</sup> it heralded a new way to do business. However, tempering its glorious debut, DAOs have been plagued by vulnerabilities resulting in millions of dollars in losses and also implicated in criminal activity.<sup>3</sup> DAOs have also been embroiled in multiple lawsuits and attempts to pinpoint a DAO's legal characterisation have been thwarted by its chameleon-like features.<sup>4</sup>
- 1.2 Recent litigation in the United States demonstrates the complex liability questions that can arise in respect of DAOs.<sup>5</sup> In jurisdictions that do not recognise DAOs as a separate legal person, DAOs may be general partnerships in which token holders are jointly and severally liable for the DAO's wrongful acts. This undesirable outcome fiercely hinders the creation of an environment that enables DAOs to prosper. As a result, it has led to jurisdictions considering the best way to regulate DAOs and whether to grant DAO participants limited liability, a key to enabling business.
- 1.3 To envision the solution, policymakers have turned to understand the liability affecting DAO token holders. A translation of directors' duties to DAO token holders is imperfect because of some fundamental differences for example directors owe duties to shareholders; in a DAO there are no shareholders. Furthermore token holders are not capable of committing wrongful acts that a director of a company might be able to perform. However, this paper argues that such duties can provide an appropriate foundation for a DAO specific liability regime.
- 1.4 By legislating the recognition of DAOs in legal systems around the world, an opportunity arises for businesses to turn to DAOs as an alternative to the corporate vehicle. D&O insurers play an important role in ensuring directors have the confidence to perform their

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<sup>&</sup>lt;sup>2</sup> Brijesh Jeevarathnam, 'DAOs; The Biggest Corporate Innovation Since Limited Liability?'

<sup>&</sup>lt;a href="https://www.adamsstreetpartners.com/insights/daos/">https://www.adamsstreetpartners.com/insights/daos/">https://www.adamsstreetpartners.com/insights/daos/</a>.

<sup>&</sup>lt;sup>3</sup> See, for example, the hack of The DAO <a href="https://www.coindesk.com/consensus-magazine/2023/05/09/coindesk-turns-10-how-the-dao-hack-changed-ethereum-and-crypto/">https://www.coindesk.com/consensus-magazine/2023/05/09/coindesk-turns-10-how-the-dao-hack-changed-ethereum-and-crypto/</a>>.

<sup>&</sup>lt;sup>4</sup> See, for example, litigation against the Ooki DAO <a href="DAO">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/>">https://www.coindesk.com/policy/2023/06/09/cftc-wins-lawsuit-against-poki-dao/</a>

<sup>&</sup>lt;sup>5</sup> Sarcuni et al. v. bZx DAO et al. - 3:22-cv-00618 (S.D.N.Y. 1 December 2020).

duties in the world of corporate law. What does the DAO opportunity mean for insurers? This paper considers the development of the DAO concept, liability issues, and proposals for token holder liability in this exciting and emerging area of law.

### 2 What is a DAO? A brief history

- 2.1 As originally conceived, a DAO is an 'organisation' that uses smart contracts to enable a group of members (token holders) to vote on decisions relating to its operation, most commonly in relation to expenditure of the DAO's treasury.<sup>6</sup> The organisation is 'autonomous' because it operates in an automated manner rather in accordance with shareholders agreements or some other document.<sup>7</sup> Ethereum describes a DAO as a 'collectively-owned blockchain-governed organisation working towards a shared mission'.<sup>8</sup> A DAO is different to a company because it features a decentralised governance process facilitated by decentralised electronic architecture. In this way, the structure does not require any formal management hierarchy or centralised control.<sup>9</sup>
- 2.2 A notable experiment that thrust DAOs into the public spotlight was 'The DAO'. 'The DAO' was launched on 30 April 2016, and its creation has generally been attributed to a German technology company called Slock.it. 'The DAO' was not the one and only DAO, but unfortunately some people thought that it was due to its name. 'The DAO' was also not a true DAO due to some technicalities (e.g. token holders could not vote to change its underlying rules). Nonetheless, 'The DAO' experiment highlights some of the key features of DAOs.
- 2.3 The hypothesis behind 'The DAO' experiment was that the use of 'smart contracts' coded on a public blockchain would enable new forms of social interaction; one that was transparent, efficient, fair and democratic.<sup>10</sup> 'The DAO' was coded by its founders and, upon launch, accepted investments for a period of 28 days. 'The DAO' broke crowdfunding records, receiving approximately 11.9 million Ether in investment (equivalent of approx. USD 250m).<sup>11</sup> An estimated 20,000 people invested in 'The DAO'.
- 2.4 The use of these funds was to be subject to project proposals and a voting process executed by way of smart contract. Anyone who held a token could create a proposal to be voted on by the token holders. During the early life of 'The DAO', one of the proposals was to use the DAO funds to hire Slock.it to design and manufacture a 'smart lock' for use in shared accommodation. The 'smart lock' would enable hosts to electronically grant access

<sup>&</sup>lt;sup>6</sup> Carlos Santana et al, 'Blockchain and the emergence of Decentralized Autonomous Organizations (DAOs): An integrative model and research agenda' *Technological Forecasting and Social Change* Vol 182 (September 2022).

<sup>&</sup>lt;sup>7</sup> Australian Law Reform Commission, 'Background Paper FSL7 - New Business Models, Technologies, and Practices' (October 2022).

<sup>&</sup>lt;sup>8</sup> Ethereum, 'Decentralised Autonomous Organisations (DAOs) <a href="https://ethereum.org/en/dao/">https://ethereum.org/en/dao/>.

<sup>&</sup>lt;sup>9</sup> Ibid.

 <sup>10</sup> Quinn DuPont, 'Experiments in Algorithmic Governance: A history and ethnography of 'The DAO,' a failed Decentralized Autonomous Organization' *Bitcoin and Beyond* (Routledge, 2017).
 11 Ibid.

- to approved renters. Token holders of 'The DAO' would earn commission on each transaction that used the system. Other proposals that 'The DAO' received included the creation of a ride-sharing vehicle and an online gaming system.
- 2.5 In order to 'vote' on a proposal, token holders simply allocated their DAO tokens towards that proposal. In other words, funding it through the placing of the vote. However, before the activities of 'The DAO' began, a hacker exploited a vulnerability in the code of 'The DAO' and drained approximately 30% of all its funds. The exploit used was a 'race to empty' exploit. It involved executing code to exit the DAO on a recursive basis, exploiting the fact each time that the running balance had not yet been updated.
- 2.6 As a result of 'The DAO' experiment, the Ethereum blockchain underwent a 'hard fork' to restore the funds to the original contract. This split the blockchain into 'Ethereum Classic' (the problematic blockchain) and 'Ethereum'. The 'hard fork' was a significant turning point for the Ethereum community; it showed that centralised leadership was perhaps still necessary in a decentralised community. The implementation of the 'hard fork' polarised some members of the Ethereum community.
- 2.7 Since 'The DAO' experiment, numerous new DAOs have been created on Ethereum.
  Confidence in security has somewhat been restored to the community. DAOs are no longer an experiment but the preferred way of transacting for decentralised finance businesses.

### DAOs today – does unlimited liability DeFi belief?

- 2.8 As foreshadowed, DAOs are commonly used in the DeFi space. The Bank of England has defined DeFi as 'applications that seek to provide a range of financial services, including loans and exchanges, with the aim of reducing reliance on centralised financial intermediaries. These alternative financial applications are built on distributed ledger technology.' One example includes the use of DAOs as an investment vehicle. Outside of DeFi, DAOs can also govern Metaverse worlds.
- 2.9 DAOs in DeFi can be structured in a multitude of ways. The parameters are usually around regulating who may participate in the DAO, the governance protocol, and whether there is a legal nexus to an off-chain/real world entity (i.e. an appropriate legal wrapper). A legal wrapper may be a corporate entity that enables the DAO to interact with entities in off-chain/real world transactions.

<sup>&</sup>lt;sup>12</sup> Bank of England, 'Financial Stability in Focus: Cryptoassets and decentralised finance' (March 2022).

<sup>&</sup>lt;sup>13</sup> For example, see MeebitsDAO <a href="https://www.meebitsdao.com/">https://thelao.io/>.

<sup>&</sup>lt;sup>14</sup> For example, see Decentraland which is a virtual world governed by a DAO and anyone who owns the platform's token (MANA) can participate in the process <a href="https://decentraland.org/">https://decentraland.org/</a>. Also see Ray Giblett and Tim Chan, 'Game on: The virtually real risks for financial lines insurers playing in Web 3.0 and the Metaverse' *Paper for Association Internationale de Droit des Assurances – 2022 AIDA Europe Assembly, Financial Lines Working Party* (October 2022).

- 2.10 For the purposes of our paper, the most important part of the set-up are the last two items; the governance protocol and the legal nexus to a real world entity.
- 2.11 These items are significant because:
  - (1) Governance: from a governance perspective, while DAOs are conceptually democratic, few DAOs are true democracies. In a DAO, one person does not necessarily have one vote. Instead, each token allows for one vote. Accordingly, power can be concentrated in the hands of a few creating governance concerns.
  - (2) **Legal nexus**: In most jurisdictions, DAOs are not recognised as a separate entity, are not able to enter into contracts or hold assets, and are not able to sue or be sued. This has resulted in the need for DAOs to adopt a legal wrapper. For example, the use of a Cayman Islands based foundation company is sometimes an attractive option.<sup>15</sup> In order to create real world contractual regulations, DAOs may need to delegate their authority to an individual, group of individuals or a corporate entity. There have been some very high profile DAO collapses,<sup>16</sup> but also some success stories.<sup>17</sup>
- 2.12 The uncertain legal nature of DAOs in jurisdictions that do not recognise them as a distinct structure creates liability risks for those involved in its development and individuals who may be token holders. In the absence of a corporate structure, there is no protection in the form of limited liability. While some jurisdictions such as Wyoming have modified the law to enable DAOs to have legal personality, in the absence of such regulation some believe that DAOs may be considered general partnerships, which have a legal personality in that each of the members are partners. <sup>18</sup> This would expose each of the members of the DAOs to personal liability, a very undesirable proposition.

### 3 Governance of DAOs and implications for token holders

3.1 As briefly explained above and explored in more detail within section 4 of this paper, legal action can presently be taken against DAOs with token holders being jointly and severally liable as partners. However, if a legal system was to recognise DAOs as having separate personality, what duties should token holders owe?

https://www.coindesk.com/learn/2016/06/25/understanding-the-dao-attack/>.

 <sup>15</sup> See commentary from the Carey Olsen law firm, 'Cayman Islands Foundation Companies for DAOs, Defi and NFTs' (Web Page, 6 April 2022) <a href="https://www.careyolsen.com/briefings/cayman-islands-foundation-companies-daos-defi-and-nfts">https://www.careyolsen.com/briefings/cayman-islands-foundation-companies-daos-defi-and-nfts</a>.
 16 David Siegel, 'The DAO attack: understanding what happened' (Web Page, 25 June 2016) <</li>

 <sup>&</sup>lt;sup>17</sup> For example, see Decentraland which is a virtual world governed by a DAO and anyone who owns the platform's token (MANA) can participate in the process <a href="https://decentraland.org/">https://decentraland.org/</a>>.
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<sup>&</sup>lt;sup>18</sup> In Australia, however, a partnership can have no more than 20 members unless an exemption applies. An exemption applies for partnerships of professionals (e.g. lawyers and accountants) and partnerships for collaborative scientific research comprising at least one university and private sector participant. See *Corporations Act 2001* (Cth) s 115.

- 3.2 A starting point for this analysis is the rationale for duties in the first place. In corporate law, the objective of regulation is to protect investors and the general public.<sup>19</sup> The promotion of investor confidence is important to create a prosperous economy.<sup>20</sup> However, regulation must balance the burden placed on companies and directors, and the potential hindrance to commercial enterprise.21
- 3.3 Directors owe fiduciary duties to their company, including the duties to:
  - act in good faith and in the best interests of the company; (1)
  - (2) exercise powers for a proper purpose; and
  - (3) avoid conflicts of interest with the company.<sup>22</sup>
- 3.4 In Australia, these duties are also supplemented by statutory duties under the Corporations Act 2001 (Cth) including duties to:
  - act with care and diligence;<sup>23</sup> (1)
  - (2) act in good faith in the best interests of the company and for a proper purpose;<sup>24</sup>
  - not improperly use information or position;<sup>25</sup> (3)
  - prevent insolvent trading;26 (4)
  - ensure compliance with financial record keeping and reporting;<sup>27</sup> and (5)
  - provide information about themselves.<sup>28</sup> (6)
- 3.5 How might these duties be used as the starting point for a framework on the duties owed by DAO token holders?

#### 4 The current position

4.1 Depending on the structure taken by a DAO, token holders may owe varying kinds of duties. At one end of the spectrum, DAOs may simply be general partnerships. At the other end, there is a limited liability company in a jurisdiction that recognises DAOs as a separate legal entity. There is also some middle ground, where a DAO may utilise a legal wrapper as

<sup>&</sup>lt;sup>19</sup> Australian Government, 'Directors' Duties and Corporate Governance' Corporate Law Economic Reform Program Paper No. 3 (1997).

<sup>&</sup>lt;sup>20</sup> Ibid. <sup>21</sup> Ibid.

<sup>&</sup>lt;sup>22</sup> For a discussion, see *Australian Securities and Investments Commission v Adler* [2002] NSWSC 171.

<sup>&</sup>lt;sup>23</sup> Corporations Act 2001 (Cth) s 180.

<sup>&</sup>lt;sup>24</sup> Corporations Act 2001 (Cth) s 181.

<sup>&</sup>lt;sup>25</sup> Corporations Act 2001 (Cth) s 182-183. <sup>26</sup> Corporations Act 2001 (Cth) s 588G.

<sup>&</sup>lt;sup>27</sup> Corporations Act 2001 (Cth) s 344.

<sup>&</sup>lt;sup>28</sup> Corporations Act 2001 (Cth) Part 2D.5.

a temporary measure, enabling the DAO to undertake off-chain/real-world transactions notwithstanding it has not been granted legal personality.<sup>29</sup>

### 4.2 The duties owed by these are:

- (1) As a **general partnership**, partners owe to each other the duty of utmost good faith and have a fiduciary relationship to each other. They must not utilise partnership assets for own private benefit, take any profit improperly, or carry on the business of the partnership other than for the benefit of the partnership.<sup>30</sup>
- (2) As a **DAO recognised limited liability company** (available in Wyoming and Tennessee), token holders do not owe fiduciary duties to each other by virtue of legislation.<sup>31</sup>
- (3) As a **wrapped DAO**, the token holders owe fiduciary duties in accordance with the relevant corporate law applicable in the jurisdiction where the DAO is incorporated, for Australia, those set out at paragraphs 3.2 and 3.3 above.
- 4.3 It is unlikely that any of these three options are a likely outcome for jurisdictions currently considering enshrining DAOs as having separate legal personality. The general partnership model is undesirable due to unlimited liability, the DAO recognised limited liability company waives fiduciary duties notwithstanding the possibility that token holders may act for their own personal interests to the detriment of the DAO, and the wrapped DAO is only a temporary solution while DAOs seek to attain legal personality.
- As a middle ground, the most likely outcome that policymakers and the community envision is a hybrid of options two and three, a DAO recognised legal entity but where token holders are responsible and owe some sort of duty. But why is liability necessary and what might this look like?

### 5 The agency problem

One argument commonly voiced against the imposition of obligations akin to directors' fiduciary duties for DAO participants is that DAOs do not suffer from the agency problem that traditional companies face. The agency problem is that agents may act in their own

<sup>&</sup>lt;sup>29</sup> A legal wrapper is the creation of a separate legal entity through which a DAO may conduct off-chain/real-world activities. See Chris Brummer and Rodrigo Seira, 'Legal Wrappers and DAOs' *SSRN* (May 2022).

<sup>&</sup>lt;sup>30</sup> Dean v McDowell (1878) 8 Ch D 345. Also see discussion of the 'no conflict' and 'no profit' rules in Kak Loui Chan v Zacharia [1984] HCA 36.

<sup>&</sup>lt;sup>31</sup> Wyoming Stat. Ann. 17-31-110 provides that "Unless otherwise provided for in the articles of organization or operating agreement, no 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." Similar legislation operates in Tennessee: Tennessee Code 4-825-109 provides that "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."

self-interest to the detriment of the entity for which they ought to act.<sup>32</sup> The removal of the board of directors and the empowerment of token holders to directly control and implement proposals through democratic voting allegedly removes the agency problem.

- However, as foreshadowed earlier in this paper, DAOs are not true democracies in that one person has one vote. It is possible that:
  - a single or concentrated group of individuals acquire sufficient tokens to control any governance proposal;
  - (2) tokenholders can assign their voting powers to delegates;<sup>33</sup> and
  - (3) by virtue of their code, DAOs can centralise power in a 'governance board'.34
- 5.3 These scenarios create the possibility of divergent interests. D&O insurers may want to note that the agency problem is further affected by factors such as low token holder participation rates, meaning that the majority of token holders do not participate in governance transactions. Analysis of the top three DAOs shows that the average participation rate is approximately 20%.<sup>35</sup> This is problematic for two main reasons. The first is that there is less scrutiny of proposals, and there is a greater risk that a single token holder controls and given proposal in the absence of quorum requirements.<sup>36</sup>
- 5.4 The anonymity that is fundamental to DAOs also enables individuals or corporate to acquire tokens quietly and evade detection.<sup>37</sup> While all blockchain transactions are public, it is possible to obscure ownership of tokens to maintain a perception that no single token holder is responsible for the majority of the tokens of the protocol. It has also been said that anonymity prevents social norms from combatting self-interested dealings.<sup>38</sup>
- 5.5 Last but not least, DAOs are codes on a blockchain. Even if there are high participation rates among token holders, it is possible that a large number of token holders are not completely code-literate, meaning they rely on natural language descriptions of the code when voting on governance decisions. This creates the possibility for token holders to seize upon this vulnerability and persuade token holders to vote in a particular way for a proposal based on a misconstrued description of the code.<sup>39</sup>

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<sup>32</sup> Pallab Biswas, 'Agency Problem and the Role of Corporate Governance Revisited' (October 2008)

<sup>&</sup>lt;a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1287185">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1287185</a>.

<sup>&</sup>lt;sup>33</sup> For an example, see delegated voting in The LAO DAO < https://medium.com/@thelaoofficial/the-lao-previewing-delegated-voting-e0b6241bffbb>.

<sup>&</sup>lt;sup>34</sup> Alex Dolphin, 'Scaling DAOs through Fiduciary Duties' *Brigham Young University Law Review* 48:3 (2022). For a live example, see the governance framework for Ape Coin which utilises a board to veto proposals <a href="https://apecoin.com/governance">https://apecoin.com/governance</a>.

<sup>&</sup>lt;sup>35</sup> See Tally <a href="https://www.tally.xyz/explore">https://www.tally.xyz/explore</a>.

<sup>36</sup> Ibid, 993.

<sup>&</sup>lt;sup>37</sup> Pranav Garimidi, Scott Duke Kominers and Tim Roughgarden, 'DAO Governance Attacks, and how to avoid them' <a href="https://a16zcrypto.com/posts/article/dao-governance-attacks-and-how-to-avoid-them/">https://a16zcrypto.com/posts/article/dao-governance-attacks-and-how-to-avoid-them/</a>.

<sup>&</sup>lt;sup>38</sup> Dolphin, above n 34.

<sup>39</sup> Ibid.

- 5.6 All of these are potentially relevant factors for underwriting a risk involving a DAO.
- 6 Proposals for tailored liability regimes to address the agency problem in DAOs
- 6.1 Having established the existence of the agency problem in DAOs notwithstanding their decentralised and autonomous nature, what kind of duties should DAO token holders owe? This is a relevant consideration for D&O insurers considering expansion of their programs to DAO token holders.<sup>40</sup> It has been argued that a subset of the traditional fiduciary duties as applicable to directors of corporations is appropriate.<sup>41</sup>

## Act in good faith and in the best interests of the company, exercise powers for proper purpose

- 6.2 It is argued that this duty should still apply to DAOs, but with 'company' replaced with 'other DAO token holders'. The rationale for maintaining this obligation is to protect other token holders from a number of adverse actions that may occur. Such an obligation is important in some jurisdictions, such as the United States, where the majority traditionally owe a fiduciary duty to the minority.<sup>42</sup>
- 6.3 Absent statutory intervention, such fiduciary obligations could prevent DAO token holders that hold a controlling stake from diluting minority token holders without regard to their interests. Similarly, DAO token holders could be restricted from voting on governance proposals that require compulsory buy-out of minority token holders at an unfair price. Fiduciary obligations would prevent DAO token holders from implementing governance changes that make minority holders worse off.
- 6.4 However, a broad application of the duty to act in good faith to DAO token holders (in the same manner as for directors of companies) is not fit for purpose. As described in this paper, while some DAOs feature a large number of token holders only few (based on most recent data, approximately 20%), participate in governance decisions. It is therefore important that token holders who are passive participants on the DAO would not be breaching the duty to act in good faith. A positive duty to act would discourage a significant part of the DAO community from participating altogether. A narrower application of the duty is arguably appropriate, to address the concerns outlined at paragraph 6.3 above, and would be more akin to the treatment of shareholders at present. Accordingly, the duty should be a duty not to act in bad faith so as to address the risk that token holders who do participate in governance decisions act in this way.

<sup>&</sup>lt;sup>40</sup> It is an offence under the *Corporations Act 2001* (Cth) for a company or related body corporate to pay any insurance premium for an officer against a liability involving wilful breach of duty or a contravention of sections 182 (use of position) or 183 (use of information). While there are some legal structures to minimise the impact of these restrictions, the rationale for such prohibitions is to avoid moral hazard. These arguments should still apply to DAOs.

<sup>&</sup>lt;sup>41</sup> Ibid, considering the position in the United States.

<sup>&</sup>lt;sup>42</sup> Peta Spender, 'Compulsory Acquisition of Minority Shareholdings' (2013) *Company and Securities Law Journal*.

<sup>&</sup>lt;sup>43</sup> Tally, above n 35.

<sup>&</sup>lt;sup>44</sup> Dolphin, above n 34.

Another potential solution is for the duty to apply only to those who put forward and vote on a particular proposal. However, issues may arise where a token holder may be forced by another to put forward a proposal, veiling the true proposer. Some critics of this proposal have also commented that imposing such liability on proposers is not in the interests of the DAO community as it may deter proposers from fixing bugs in the code. Those who identify problems or errors in the DAO's code, such as security vulnerabilities, may be discouraged from lodging proposals to change the code due to the potential liability that attaches by virtue of being the proposer, as their role is singled out.

### Avoid conflicts of interest and take up corporate opportunities

- 6.6 However, perhaps one of the most controversial points relates to conflicts of interest and the corporate opportunity doctrine. In many jurisdictions including Australia, a fiduciary can be found liable for taking a corporate opportunity that belongs to the company. Such an action may breach the directors' duties under ss 182-183 of the *Corporations Act 2001* (Cth) where there is a causal connection between the office held and the opportunity.<sup>46</sup> It may also be a breach of s 181 in light of the common law expression of the duty of utmost good faith.<sup>47</sup>
- 6.7 It has been argued that these obligations should not apply to DAOs because it would hinder investment in DAOs. Token holders working on one DAO could be prevented from working for other DAOs in a similar line of business.<sup>48</sup> This goes against one of the fundamental precepts of Web 3, being that people will be able to work for multiple DAOs and not tied to any one employer.<sup>49</sup> A waiver of the 'no conflict' rule and corporate opportunity doctrine is said to be required in order to enable people to work and invest in multiple DAOs at the same time.

### 7 Opportunities for D&O insurance

7.1 This liability framework provides opportunities for D&O insurance.

### 8 Other actions against DAOs

8.1 This paper has so far explored at a high level how traditional directors' duties could be applied to DAO token holders should DAOs be granted legal personality. As can be seen, some tailoring is required to meet the needs of DAOs.

<sup>&</sup>lt;sup>45</sup> Alexandra Sims, Blockchain and Decentralised Autonomous Organisations (DAOs): the evolution of companies?' (2019) 28 New Zealand Universities Law Review 423-458.

<sup>&</sup>lt;sup>46</sup> Bede Harris, 'The Corporate Opportunity Doctrine and Directors' Duties – A Critique of the Law in Australia' *Canberra Law Review* (2020) 17(2).

Review (2020) 17(2).

47 See the formulation of the 'no conflict' rule in Aberdeen Railway Co v Blaikie Brothers (1854) UKHL 1 concerning self-dealing.

<sup>&</sup>lt;sup>48</sup> Dolphin, above n 34.

<sup>&</sup>lt;sup>49</sup> Ben Schechter, 'The Future of Work is not Corporate – It's DAOs and Crypto Networks' < https://a16zcrypto.com/posts/article/the-future-of-work-daos-crypto-networks/>.

8.2 However, even if a DAO does not have legal personality, there is potential recourse to other entities involved in the creation of the protocol. The class action involving the bZx cryptocurrency protocol illustrates the point.<sup>50</sup>

### bZx class action

8.3 The bZx protocol is a DeFi protocol governed as a DAO, allowing users to lend and earn interest on tokens. The protocol was initially developed by two limited liability companies (LLCs) founded by two individuals, and the protocol ultimately controlled by those who held the BZRX token. Token holders have the ability to control the assets of bZx.

### 8.4 The plaintiffs alleged that:

- (1) bZx repeatedly touted its security features, stating that 'users maintain control of their own keys and assets';
- in reality, a single password was sufficient to access all funds on two of the three blockchains on which Fulcrum (one of the bZx products) operated;
- (3) various representations on the bZx website were to the effect that funds were safe and secure, including 'world class security' and that users 'never' have to worry about 'exchanges getting hacked or stealing your funds';
- (4) on 5 November 2021, the bZx protocol was hacked because a developer who was working for the bZx DAO fell for a phishing attempt. The developer's implementation administrative private keys for two of the three Fulcrum blockchains was stolen and funds were drained; and
- (5) the bZx DAO compensation plan would take 'thousands of years' to compensate the plaintiffs.<sup>51</sup>
- 8.5 The claim is based in negligence, alleging that the bZx protocol and its 'partners' owed the plaintiffs a duty to maintain the security of the funds deposited on the protocol, including having procedures so that a phishing attack on a single developer would not result in a multimillion dollar theft. It also seeks to show that the bZx protocol and the plaintiffs had a duty to supervise developers, and that the unnamed developer had a duty to secure the passwords from malicious attacks and that the bZx DAO was vicariously liable.
- 8.6 On 27 March 2023, the United States District Court issued a ruling in this long running litigation (**March 2023 Ruling**). The Court held that a negligence claim may be brought against a DAO, as a general partnership. Those tokenholders with governance rights formed that partnership. The reasons for this decision are that:

<sup>&</sup>lt;sup>50</sup> Sarcuni et al. v. bZx DAO et al. - 3:22-cv-00618 (S.D.N.Y. 1 December 2020).

<sup>&</sup>lt;sup>51</sup> Sarcuni et al. v. bZx DAO et al. - 3:22-cv-00618 (S.D.N.Y. 1 December 2020) (Complaint).

- a partnership exists where there is an 'association of two or more persons to carry on as co-owners of a business for profit';
- (2) unless a formal entity is established, the association may be deemed a partnership; and
- (3) people may unintentionally create a partnership when they show an objective intent to engage in business together.<sup>52</sup>
- 8.7 The Court held that these requirements were met in respect of the bZx DAO. The matter will now progress to hearing on the substantive liability issues.
- 8.8 The bZx class action alleges negligence in management of crypto. While ongoing, the nature of the proceedings highlights some pertinent points:
  - (1) the plaintiffs seek compensation from the DAO alleging it is a general partnership. While some jurisdictions enable DAOs to be structured as a separate legal entity, most do not. The general partnership determination means that DAO members may have unlimited liability and do not have the level of protection afforded to corporate shareholders and officeholders;
  - (2) if it is held the DAO is a general partnership, it may mean the members/token holders are jointly and severally liable for the plaintiffs' losses;
  - (3) the proceeding is also against the bZx protocol founders personally, highlighting their potential liability for the losses incurred; and
  - (4) while many crypto related operations are decentralised, few are truly decentralised to the extent that there are no corporate entities involved in their development. Accordingly, it is possible to file legal proceedings against and seek recourse from real world entities. Well known Metaverse lands, such as Decentraland, still have a legal entity that holds the IP and conducts real world operations.<sup>53</sup>
    - In the bZx class action, the proceedings are brought against the bZx members (alleging it was a partnership), the LLC companies involved in its development, and its co-founders who controlled the LLCs, Kyle Kistner (co-founder of the bZx protocol) and Tom Bean (co-founder of the bZx protocol);
  - (5) management of private keys remains a very serious issue. Unlike transactions that take place on traditional banking infrastructure, it is not possible to reverse

<sup>52</sup> Skadden, 'Court Ruling Could Affect the Future Direction of DAOs'

<sup>&</sup>lt;a href="https://www.skadden.com/insights/publications/2023/04/court-ruling-could-affect-the-future-direction-of-daos">https://www.skadden.com/insights/publications/2023/04/court-ruling-could-affect-the-future-direction-of-daos</a>.

<sup>&</sup>lt;sup>53</sup> For example, see 'Terms of Use' (Web Page) <a href="https://decentraland.org/terms/">https://decentraland.org/terms/</a>.

- transactions that have taken place on the blockchain. It is also more difficult to identify the perpetrator; and
- (6) it will be interesting to see how the court deals with the fact that some of the members who have suffered losses, and therefore within the class of plaintiff, would also be 'partners' as they are members of the bZx DAO and are therefore within the class of defendant within the proceeding. This would create a conflict of interest, as the plaintiffs allege that the DAO members had acted negligently.
- 8.9 In respect of the last item, the March 2023 Ruling was based on the finding that there was no evidence before the Court that the plaintiffs held BZRX tokens, and were therefore also partners of the general partnership. Accordingly no conflict was evident. However, the Court reserved its position should the defendants be able to establish the plaintiffs held BZRX tokens.
- 8.10 Legal recognition of limited liability DAOs as a separate legal entity will also enable them to enter into contracts, hold assets and sue and be sued. Furthermore, liability of members/tokenholders can be limited. However what types of duties should DAO token holders need to abide by? This is a particular relevant question for D&O insurers who may wish to provide protection to those involved in DAOs, the evolution of the corporation.
- 8.11 Until then, the bZx class action is a reminder that anyone involved in the DAO could be a target if something goes wrong, for example the following:
  - (1) tokenholders/members who control the assets and vote on proposals;
  - (2) the founders who set up the DAO and coded it, especially if there was an error made in the code so that the DAO did not function as warranted;
  - (3) corporate entities that may be involved in the set up or operation of the DAO;
  - (4) representatives of the DAOs. Until DAOs have separate legal personality, they may need to delegate authority to a natural person to carry out real world functions. The person might be an agent of the DAO. If a DAO does have legal personality, such a person could be considered an 'officer' of the DAO;
  - (5) auditors who might be appointed to review the code of the DAO; and
  - (6) oracles relied on by the DAO if they provide incorrect data.

### 9 The future

9.1 As explored in this paper, the issue for lawmakers is whether and how to design a regulatory regime that will give DAOs legal personality, and balance protection of the

- community with the desire to give a degree of protection to DAO participants as well. At the time of writing, only a limited number of jurisdictions enable a DAO to register as a legal entity. These are the Cayman Islands, Vermont, Wyoming and Tennessee.<sup>54</sup>
- 9.2 Australia's Senate Select Committee on Australia as a Technology and Financial Centre recommended in October 2021 that Australia recognise a DAO company structure.<sup>55</sup> The Australian Law Reform Commission has also been considering appropriate options for recognition of DAOs as part of the multi-year Legislative Framework for Corporations and Financial Services Regulation Review. The review began in 2021 and the final report is due by November 2023.
- 9.3 In the United Kingdom, the Law Commission issued a call for evidence in November 2022 asking for submissions on how DAOs should be characterised. It has now commenced a 15 month scoping study to explore and describe the current treatment of DAOs under the law of England and Wales, and to identify how DAOs should be treated in the future.
- An area of controversy in designing a regime for legal recognition of DAOs into Australian company law is whether liability should attach to a certain person or entity. Prior to the election, media reports stated that the Treasury was consulting with stakeholders in relation to the new regulatory regime, and that it may require the DAO to nominate a 'responsible person'. The responsible person would enable regulators and courts to hold someone responsible if the DAO failed.
- 9.5 While it is easy to see the community protection argument for such a proposal, it partially defeats the purpose of a DAO which is to enable decentralised participants to make decisions. It is also challenging to see how liability might be attributed to this person, in circumstances where they might not have any oversight or control over the decentralised participants, or even know who they are. Those setting up DAOs may find such restrictions unfavourable when other jurisdictions do not have similar requirements.

### 10 Conclusion – removing DAObt and uncertainty

10.1 This paper has considered the rationale for DAO token holders to be subject to fiduciary duties. While DAOs are fundamentally democratic structures, they are not true democracies as control over tokens can be concentrated in the hands of a few. Furthermore, not everyone in the democracy is required to participate.

 <sup>&</sup>lt;sup>54</sup> Scott Sugino et al, 'DAOs: Looking for Limited Liability & Legal Personality' (Web Page, 11 July 2022) 
 https://www.omm.com/resources/alerts-and-publications/alerts/daos-looking-for-limited-liability-and-legal-personality/>.
 <sup>55</sup> Australian Senate, Select Committee on Australia as a Technology and Financial Centre *Final Report* (October 2021)
 <a href="https://www.aph.gov.au/Parliamentary\_Business/Committees/Senate/Financial\_Technology\_and\_Regulatory\_Technology/AusTechFinCentre/Final\_report/section?id=committees/2freportsen%2f024747%2f78047>.

<sup>&</sup>lt;sup>56</sup> James Eyers, 'Decentralised autonomous organisations: where does the buck stop?' (Web Page, 24 March 2022) <a href="https://www.afr.com/companies/financial-services/dao-consultation-will-involve-thorny-questions-on-responsibility-20220324-p5a7lp">https://www.afr.com/companies/financial-services/dao-consultation-will-involve-thorny-questions-on-responsibility-20220324-p5a7lp>.

- 10.2 Due to these issues, an argument for a liability regime based on the concept of a fiduciary is a sound one. While a translation of traditional directors' duties to DAOs token holders is imperfect, traditional directors' duties provide an appropriate foundation for formulating a DAO specific regime.
- 10.3 With some changes tailored to DAOs, a regime based on directors' duties under company law can be created that protects those participating in DAO ventures without stifling innovations. These duties are also not foreign concepts for D&O insurers. As jurisdictions legislate for legal recognition of DAOs, D&O insurers can, like they have for directors of companies, provide the confidence token holders need to enable DAOs to prosper in a brave new world.