

Seminar Civil Law and Computer Science Distributed Trust in Finance

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Topic description

How can decentralized structures and their DeFi activities be classified under corporate and/or civil law?

Recently, several so called DAOs ("decentralized autonomous organizations") made the headlines. For example, ConstitutionDAO¹ raised 47 million USD in Ether (ETH) to buy a physical copy of the US constitution. Other projects, for example a DAO linked to operators of the Dash virtual asset, fund research labs and other centralized ventures.² This raises interesting questions along the dividing line between decentralized and centralized actions.

1. Computer Science Task

Characterize how some DAOs are implemented and describe technical foundations of DAOs:

- Explore Dash (https://docs.dash.org), it is a coin with its own blockchain; describe how its network operates (consensus, mining, masternodes, operations and smart contracts it permits, coin ownership, voting)
- Explore ConstitutionDAO, built with the Juicebox protocol (https://juicebox.money/ and https://juicebox.money/protocol/protocol), it is an ERC-20 token running on Ethereum; describe how it operates (consensus, token ownership, operations of the smart contract, voting)
- Describe similarities and differences between these two types of DAOs
- Describe potential attacks (such as DoS, flooding, spam etc.) that can be mounted against DAOs

2. Law Task

Relate and compare aforementioned projects to existing legal concepts under Swiss private law:

- Who are the stakeholders? What are their responsibilities?
- Which claims do "investors" have?
- What is the relationship to collective investment schemes?
- What is the (legal) differences between ICO projects (2015-2018) and NFTs?

¹ See under: https://en.wikipedia.org/wiki/ConstitutionDAO>.

² 3TV, Cryptocurrency Dash aims to give mainstream money a run!, 24 August 2018, available under: https://www.youtube.com/watch?v=yVtfJVmIFlw.

How are liabilities assigned?

You may use ConstitutionDAO (https://www.dash.org/) or Dash (https://www.dash.org/) as an example (you are of course free to use other, comparable, systems).

Materials/Literature

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