An Overview of Governance in Blockchains

An introduction to the working paper by Odysseas Sclavounis and Nic Carter

About the authors

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Objectives

- Discuss how "blockchain governance" has been used to refer to distinct phenomena

- Propose what "blockchain governance" should refer to

- Provide a definition for public blockchain governance

What do we talk about when we talk about governance?

"self-governance with **no undue influence from founders after initial launch** and public access — contract governance starts at launch"

"The Cardano blockchain has an **airtight governance model** that allows the community to **democratically** take clear and binding decisions."

"The EOS.IO blockchain governance process recognizes that **power originates with the token holders** who then delegate that power to the block producers."

"Dash is the first **decentralized autonomous organization** operating with a **Sybil-tested** decentralized governance and funding system."
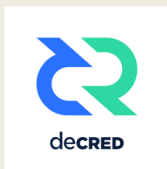
"Our innovative consensus voting model empowers stakeholders and allows for the **seamless transition from one set of rules to another**."

– An Overview of Governance in Blockchains –

"Blockchain governance" has been conceptually stretched to the point of near meaninglessness.

Why blockchain governance matters

- Blockchain protocols = rules of the game = institutions

- Institutions, and blockchain protocols, have important distributional consequences

- Protocol change in blockchain systems is bound to be contentious as it redistributes power and resources across the stakeholders of the system

- Evidenced by the blocksize debate, DAO crisis, etc.

Blockchains as decentralized corporations

Similarities	Dissimilarities
Tokenholders as shareholders	Can be easily forked
Constitutions as charters	No obvious corporate structure
Fiduciary obligations to shareholders?	Developer teams cannot be fired
Public offerings	Tokens offer no recourse
Dividends and periodic capital return (in some cases)	Can be abandoned, zombified, and restarted by novel groups
	Shareholder votes are a relatively minor part of corporate governance

Blockchains as political systems

Similarities

Monetary policy

Taxation, treasuries, and budgets

Duly elected representatives

Constitutions

Shared philosophical values and founding myths

Implicit social contracts

Identity strongly linked to the system

Dissimilarities

On-chain democracy not possible with current tools

Blockchains with on-chain votes are effective plutocracies

No solution for cartelization

Lack of checks and balances

A proposed definition

Blockchain governance: *How public blockchain communities and key stakeholders arrive at collective action, specifically with respect to protocol change.*

- Governance: **the processes of cooperation and coordination involved in achieving collective action**. (Adapted from Hufty 2011)

- In our context, this refers to the creation and maintenance of **institutions**, both **formal and informal**, to regulate behavior.

Common misconceptions

- Blockchains like Bitcoin are ungoverned
  - *Governance is opaque, not nonexistent*

- Governance is a technical feature that can be appended to blockchains
  - *"We'll add governance later"*

- Blockchains do not require governance
  - *"Do gold atoms need governance?"*
  - *"This is a technical project, all decisions are routine"*

On-chain governance

Non-binding votes

Direct on-chain votes

Delegative on-chain votes

Some drawbacks of on-chain votes

- *Just one piece of the corporate governance puzzle*

- *Voters are apathetic/unwilling/unable*

- *They cartelize*

- *Representative votes aren't transparent*

- *They are asynchronous and inefficient*

- *Barriers to entry exist*

Off-chain governance

- Spiritual cousin – but not direct clone – of FOSS governance
  - *OS software: you can legally fork/copy*
  - *How do you fork a ledger which defines property rights?*

- Why the distinction from typical open source processes?
  - *Stakes are higher*
  - *Weight of expectations must be managed*
  - *Protocol is directly financialized*
  - *Deliberate orientation towards mainstream end user*
  - *Legal and regulatory implications*

Off-chain mechanisms

- Implementation level – how the software is built
  - *Processes through which developers interact and develop software*
  - *Typically well-understood and sometimes rigorously formalized*
  - *BIPs, EIPs, ZIPs, mailing lists, Github*
  - ***How changes to Bitcoin Core/ABC are mediated***

- Community level – how consensus emerges between the community, users, and leadership
  - *Poorly-understood and given insufficient credit in governance conversations*
  - *Infrequently included in conceptions of blockchain governance*
  - *Nevertheless, vital to retain legitimacy*
  - *Slack, telegram, IRC, mailing lists, Reddit, Twitter, conferences*
  - ***How Bitcoin/Ethereum is defined more generally***

Parting thoughts

■ Important to decouple normative and descriptive views of governance

■ Be honest about where power structures truly reside in a blockchain system

■ Avoid the urge to obscure power nexuses through complex and obscure voting processes

■ Situate governance mechanisms – find analogies and prior art

■ "Blockchain governance" as multi-stakeholder institution-building instead of hastily cobbled-together on-chain votes

■ How to obtain and retain buy-in from the community:
  – *Establish shared values and norms*
  – *Be inclusive (to your constituents)*
  – *Formally engage stakeholders*
  – *Be transparent*
  – *Be accountable*