Governance and Liquid Staking

Liquid Staking Working Group

On-Chain Governance Overview

Governance refers to the processes a system uses to determine its rules.

Traditionally, blockchains have relied on off-chain governance processes. Discussions take place and miners have the final say by determining which software to run.

This can be a complex and intransparent process. Conflicts are hard to resolve. (e.g. Bitcoin block size debate)

Many new chains use on-chain mechanisms to increase efficiency, participation and transparency of decision making.

On-Chain Governance Today

Tezos was one of the earliest systems with on-chain governance. Today, networks with on-chain governance include Cosmos, Tezos, Dash and Decred. Many other blockchains are launching soon including Polkadot and Celo.

The most common mechanism is coin-voting, restricted to coins that are being staked.

Results from on-chain governance are mostly positive (Cosmos, Tezos), though some networks have seen controversial outcomes. These mostly seem due to outsized influence of exchanges voting with customer funds. (Steem, EOS)

Where We Are Today

On-chain governance is promising, but many questions remain open. There is no long-term data to support that it works.

Some, especially in Ethereum community (Vitalik Buterin, Vlad Zamfir) are vehemently against on-chain governance.

Exchanges are a clear threat to on-chain governance models.

Sophisticated attacks on governance like on-chain vote buying haven't yet been done.

Unclear how liquid staking and on-chain governance would play together.

On-Chain Vote Buying

Phil Daian (2018): <u>Preventing vote-buying is impossible in a blockchain</u> <u>governance system.</u>

Example:

A cosmos governance vote comes up. A party creates a smart contract on Ethereum and funds it with \$1m worth of ETH. Anyone who votes for the governance proposal can present evidence of that on Ethereum. In the end, the \$1m is distributed to all those who voted yes and presented their evidence.

Future: Allow anonymity for process with zero knowledge proofs.

On-Chain Vote Buying

- Is impossible to prevent for any blockchain
- Is already easy to do without any changes to Cosmos

The conclusion of Daian is that: "All on-chain voting systems degrade to plutocracy".

Implications of Vote Buying

Vote buying clearly undermines a voting system that tries to replicate democracy. Idea of democracy is to separate voting from money.

But on-chain governance systems are nothing like democracies. They are much more similar to the governance process of a corporation.

If voting right in the system are tied to ownership of the system, is the ability to sell those voting rights still a problem?

It is apparently legal to pay someone to vote a certain way with their shares: https://hbr.org/2005/06/shareholder-votes-for-sale

Discussion Questions I

Should one allow governance votes across chains? An example would be StakerDAO, where staked ATOMs are controlled on another chain.

With delegation vouchers, do they have to be brought back to the host chain to vote. (Downside might be to dramatically decrease participation. Actually lower cost of buying elections)

Is it okay for somebody to pay a staker to vote in a certain way?

What kind of accountability is provided by the ability to hard fork a chain?

Does it make sense to require tokens to be locked up following a vote? Or to give more votes to coins that submit to a longer lockup?

Discussion Questions II

Recently Binance participated in a governance decision on Steem to support action by Justin Sun. This lead to a big backlash from the Steem community. Should PoS networks actively discourage exchanges from participating in governance?

For those working on liquid staking protocols, how do you deal with governance rights in your designs?