Course III:

DeFi Deep Dive

1. Credit and Lending

(ii) Compound

(d) Governance

Credit/Lending: Compound

Governance parameters

- The many different parameters of Compound's functionality, such as the *collateral factor, reserve factor, base rate, slope,* and *kink*, can all be tuned.
- The entity capable of tuning these parameters is *Compound Governance*.
- Compound Governance has the power to change parameters, add new markets, freeze the ability to initiate new deposits or borrows in a market, and even upgrade some of the contract code itself.

Credit/Lending: Compound

Governance

- Importantly, Compound Governance cannot steal funds or prevent users from withdrawing.
- In the early stages of Compound's growth, governance was controlled by developer admins, similar to any tech startup.
- Technically, this meant that the first version of Compound was not fully decentralized

Credit/Lending: Compound

Governance parameters

- A strong development goal of Compound, as with most DeFi protocols, was to remove developer admin access and release the protocol to the leadership of a DAO via a governance token.
- The token allowed shareholders and community members to collectively become Compound Governance and propose upgrades or parameter tuning.
- A quorum agreement is required for any change to be implemented.
- The quorum rule is a majority of users each of whom holds with a minimum of 400,000 COMP (~4% of total eventual supply)

Credit/Lending: Compound

COMP token

- Compound implemented this new governance system in May 2020 via the COMP token.
- COMP is used to vote on protocol updates such as parameter tuning, adding new asset support, and functionality upgrades (similar to MKR for MakerDAO).
- On June 15, 2020, the [7th governance proposal] passed which provided for distributing COMP tokens to users of the platform based on the borrow volume per market.

Credit/Lending: Compound

COMP token

- The proposal offered an experience akin to a tech company giving its own stock to its users.
- The COMP token is distributed to both suppliers and borrowers, and acts as a subsidization of rates.

Credit/Lending: Compound

COMP token

- With the release of the token on public markets, COMP’s market cap spiked to over $2 billion.
- The price point of the distribution rate is so high that borrowing in most markets turned out to be profitable.
- This arbitrage opportunity attracted considerable volume to the platform, and the community governance has made and passed several proposals to help manage the usage.

Credit/Lending: Compound

Other platforms use Compound

- The Compound protocol can no longer be turned off and will exist on Ethereum as long as Ethereum exists.
- Other platforms can easily escrow funds in Compound to provide additional value to their users or enable novel business models.
- Easy, instant access to yield or borrow liquidity on different Ethereum tokens makes Compound an important platform in DeFi.

Credit/Lending: Compound

Fair lotteries

- PoolTogether is a no-loss lottery that deposits all user's funds into Compound, but pays the entire pool's earned interest to a single random depositor at fixed intervals.
- In most lotteries, 30-50% of the lottery sales are tagged for administrative costs and government or charitable use; hence, the expected value of investing $1.00 in a lottery is $0.50-$0.70.
- In a no-loss lottery, all sales are paid out and the expected value is $1.00.

Credit/Lending: Compound

Traditional Finance Problem	**Compound Solution**
Centralized Control: Borrowing and lending rates are controlled by institutions.	Compound rates are determined algorithmically and gives control of market parameters to COMP stakeholders incentivized to provide value to users.
Limited Access: Difficulty in accessing high-yield USD investment opportunities or competitive borrowing.	Open ability to borrow or lend any supported assets at competitive algorithmically determined rates (temporarily subsidized by COMP distribution).
Inefficiency: Suboptimal rates for borrowing and lending due to inflated costs.	Algorithmically pooled and optimized interest rates.
Lack of Interoperability: Cannot repurpose supplied positions for other investment opportunities.	Tokenized positions via cTokens can be used to turn static assets into yield-generating assets.
Opacity: Unclear collateralization of lending institutions.	Transparent collateralization ratios of borrowers visible to entire ecosystem.