Course III:

DeFi Deep Dive

1. Credit and Lending

(i) MakerDAO

(c) Governance

Credit/Lending: MakerDAO

Governance

- The MKR token controls MakerDAO.
- Holders of the token have the right to vote on protocol upgrades, including supporting new collateral types and tweaking parameters such as collateralization ratios.
- MKR holders are expected to make decisions in the best financial interest of the platform.
- Their incentive is that a healthy platform should increase the value of their share in the platform's governance.

Credit/Lending: MakerDAO

Global settlement

- For example, poor governance could lead to a situation where the buffer pool is not sufficient to pay back the Protocol Debt.
- In this case, newly minted MKR tokens are auctioned off in exchange for DAI and the DAI are used to pay back the Protocol Debt.
- This process is *Global Settlement*, a safety mechanism intended for use only when all other measures have failed.
- Global Settlement dilutes the MKR share, which is why stakeholders are incentivized to avoid it and keep Protocol Debt to a minimum.

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Decisions of MKR holders

- Votes by the MKR holders can change any of the parameters available on the platform, e.g., supporting new collateral types for Vaults
- MKR holders could also vote to pay themselves a dividend funded by the spread between the interest payments paid by Vault holders and the DAI Savings Rate.
- The reward of receiving this dividend would need to be weighed against any negative community response that might decrease the value of the protocol and the MKR token.

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Why DAI is attractive

- Importantly, users can purchase and utilize DAI without having to go through the process of generating it in a Vault—they can simply purchase DAI on an exchange.
- Therefore, users do not need to know the underlying mechanics of how DAI are created.

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Why DAI is attractive

- Holders can easily earn the DAI Savings Rate by using the protocol.
- More technologically and financially sophisticated users can use the MakerDAO web portal to generate Vaults and create DAI to get liquidity from their assets without having to sell them.
- It is easy to sell DAI and purchase an additional amount of the collateral asset to get leverage.

Credit/Lending: MakerDAO

Drawback of DAI

- DAI supply is always constrained by demand for ETH-collateralized debt.
- No clear arbitrage loop exists to maintain the peg.
- For example, the stablecoin USDC is always redeemable by Coinbase for $1, with no fees. Arbitrageurs have a guaranteed (assuming solvency of Coinbase) strategy in which they can buy USDC at a discount or sell it at a premium elsewhere and redeem on Coinbase.
- This is not true for DAI. Irrespective of any drawbacks, the simplicity of DAI makes it an essential building block for other DeFi applications.

Credit/Lending: MakerDAO

Traditional Finance Problem	**MakerDAO Solution**
Centralized Control: Interest rates are influenced by the US Federal Reserve and access to loan products controlled by regulation and institutional policies.	MakerDAO platform is openly controlled by the MKR holders.
Limited Access: Obtaining loans is difficult for a large majority of the population.	Open ability to take out DAI liquidity against an overcollateralized position in any supported ERC-20 token. Access to a competitive USD-denominated return in the DSR.
Inefficiency: Acquiring a loan involves costs of time and money.	Instant liquidity at the push of a button with minimal transaction costs.
Lack of Interoperability: Cannot trustlessly use USD or USD-collateralized token in smart contract agreements.	Issuance of DAI, a permissionless USD-tracking stablecoin backed by cryptocurrency. DAI can be used in any smart contract or DeFi application.
Opacity: Unclear collateralization of lending institutions.	Transparent collateralization ratios of vaults visible to entire ecosystem.