Summary

Add support for an LUSD market to increase Aave's offering of decentralized stablecoins and to provide an alternative route for borrowing LUSD.

What is Liquity and LUSD?

Liquity is a decentralized borrowing protocol that allows users to draw interest-free loans against ETH as collateral (akin to MakerDAO). Loans are paid out in LUSD (USD-pegged stablecoin) and need to maintain a minimum collateral ratio of 110%. Loans are secured by the <u>Stability Pool</u>, where users can deposit LUSD that may be used to instantly repay uncollateralized debt. In return, they receive ETH collateral when liquidations occur and continuous LQTY rewards (Liquity's secondary token capturing the protocol's fee revenue).

Decentralization

In addition to Liquity's focus on capital-efficiency, the protocol was also built with a heavy focus on decentralization in 3 main ways:

- The Liquity contracts have no admin keys and are accessible via multiple interfaces hosted by third-party frontend operators, making it censorship resistant.
- The protocol is immutable and governance-free, as all operations are algorithmic and fully automated, and protocol parameters to maintain system health were set at time of contract deployment.
- LUSD is only backed by ETH and no other collateral types may be added.

Motivation

For Liquity, the main benefits would be:

- · Giving users access to the largest lending protocol on Ethereum
- Borrowing LUSD against other collateral types, which is not possible using Liquity due to the protocol being immutable
- Protection from some unfavorable mechanisms for borrowers such as Liquity's <u>redemption mechanism</u>, and <u>Recovery Mode</u> which allows Troves under 150% collateral ratio to be liquidated.

For Aave, the main benefits would be:

- Expanding its decentralized stablecoin offering and decreasing its dependence on centralized assets such as USDC, USDT, WBTC, etc.
- Allowing Aave users to tap into LUSD's yield opportunities and DeFi integrations
- By providing another use case for LUSD, there's a unique opportunity to capture some of the ~\$600m LUSD in the Stability Pool as its dominance decreases.

Specifications

- What is the link between the author of the AIP and the Asset?
- I'm a team member at Liquity focused on community and ecosystem development.
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- Provide a brief history of the project and the different components: DAO (is it live?) products (are they live?). How did it overcome some of the challenges it faced?
- Liquity launched on April 5th, 2021 and has attracted ~\$2.5B TVL since then, ranking among the top 10 projects listed on DeFi Pulse. In addition, LUSD is also ranked among the top 10 stablecoins on DeFi Pulse and is the 2nd largest collateral-backed stablecoin behind DAI. Source.
- As a borrowing protocol, minted debt (LUSD) and system health is heavily dependent on liquidation efficiency. In contrast to collateral auctions, Liquity liquidates under-collateralized Troves instantaneously substantially reducing the possibility of protocol loss and the risk of LUSD becoming partially unbacked. Around one month after launch, the protocol faced its first stress test (flash crash on 5/19) and liquidated \$93.5M against the Stability Pool with 0 protocol loss. Liquity has completely innovated this necessary function of borrowing protocols by creating a liquidation mechanism that's fast, effective, and works under extreme conditions. More info here.
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- How is the asset currently used?
- Within the protocol, LUSD is used to maintain protocol stability. Within the overall DeFi ecosystem, the primary goal is for LUSD to have a variety of use cases and meaningful integrations. Examples of this: LUSD liquidity on DEXes (Curve, Sushiswap, etc), available on lending platforms (e.g. Aave), as a treasury asset (e.g. OlympusDAO), and more.
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- Emission schedule
- · No emission schedule
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- Token (& Protocol) permissions (minting) and upgradability. Is there a multisig?
- No.
- No.
- · What can it do? Who are the signers?
- The protocol is completely immutable
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- Market data (Market Cap, 24h Volume, Volatility, Exchanges, Maturity)
- Market Cap: ~\$875m
- 24h Volume: ~\$25m
- · Volatility: Low
- Exchanges: Curve, Saddle, Uniswap, Sushiswap
- · Maturity: Protocol has been live for 7 months
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- Social channels data (Size of communities, activity on Github)
- Discord: ~5700 members
- Twitter: 23k followers
- Github here
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- · Contracts date of deployments, number of transactions, number of holders for tokens
- Date of deployment: April 5th, 2021
- Number of transactions: ~150,000
- Number of holders: 4,400
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Security Audits

Trail of Bits Security Assessment - January 2021

Coinspect - March 2021

Trail of Bits Liquity Protocol and Stability Pool Final Report- March 2021

Trail of Bits Liquity Proxy Contracts Report- March 2021

Economic Modeling and Simulation

Gauntlet - Liquity Market Risk Assessment

Yulin Liu - Macroeconomic model of Liquity

Resources

- Website
- Whitepaper
- Docs
- Github
- Contract Addresses
- Chainlink Oracle
- Discord