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Lido DAO

Lido DAO is a decentralized autonomous organization that governs their liquid staking platform. Staking is the process of users locking their cryptocurrency for a certain amount of time and receiving rewards; usually in the form of either the original token or a governance token. Particularly for the Ethereum blockchain, their incentive to have users stake their nodes is the fact that the nodes are what run the blockchain. So, in exchange for more ETH, the blockchain can run. The idea behind liquid stacking, specifically the service that Lido provides, is allowing users to submit their ETH to Lido, Lido pools together many users' ETH and creates nodes on the Ethereum blockchain to receive rewards. In exchange, users get a usable stETH token, which can be used for a variety of DeFi services. Currently, Lido DAO's market cap is \$1.5 billion fully diluted while their token stETH token has a market cap of \$14.0 billion.

Lido DAO has much value that many users take advantage of. Their token stETH allows for flexibility — Instead of a single user gathering and locking all of the ETH necessary (32 ETH ~ \$52,000) for a node on the Ethereum network, they provide individuals the opportunity to stake a portion of their ETH without locking their value. They can get the rewards of staking without locking their ETH, though they will have to pay a small fee to the DAO.

Another value of Lido Dao is the dao portion. Holders of the Lido Dao token share proportional ownership over the Dao, and they get to make the decisions on fees, node creation, and other changes that the Dao will make. This ownership over the protocol that users use allows for autonomy over their financials in a way that has never been done before in history. It is decentralizing and creating utility for these adapters. Another benefit of using Lido DAO is the fact that they are also insured as well, so if their staking goes down or is exploited, then they can claim insurance. Not only does Lido DAO give value to the users who directly stake with them, but other DeFi services are reliant on Lido's liquid staking. stETH is used for collateral for loans in many different DeFi services.

Many services such as AAVE and Curve rely heavily on Lido DAO and stETH for use as collateral in loans. So, given the interconnectedness with the largest DeFi providers, if Lido's smart contracts were to be exploited, that would have massive ripple effects on the entire crypto industry as a whole. AAVE, Curve, Uniswap, MakerDAO, etc. would all be heavily affected by an exploit, so their success is vital to the success of the crypto industry as a whole. So Lido DAO will be around for many years to come, and they will probably expand. Avalanche and Cardano will probably be the next chains that they will look at given their popularity and PoS model. They will probably add liquid staking on those chains, and hopefully provide other node services in the future.

Uniswap

Uniswap is a decentralized token exchange that uses an automated market maker to price pairs of coins. Uniswap has an advantage compared to many other DEXs given the fact that it was one of the first with an easy-to-use UI, low fees, and ease of use. The free-floating market cap of the UNI token is \$2.48. In terms of the total volume being traded within the protocol, Uniswap has \$834 million in the last 24, which is almost 4 times as high as the next highest DEX which is Pancake Swap at \$215 million.

Uniswap allows for the facilitation of trade to any coin/token in an efficient way. It also allows liquidity providers to increase their holdings of each token through swap fees. Thereby giving them some profit from giving the protocol their coins. Also, the UNI token is a governance token over the protocol, so they have the authority to make decisions about, have ownership, and provide feedback to the protocol. This, in effect, makes owners of UNI token shareholders in the Uniswap.

Uniswap has been integral for the past many years in developing the DeFi space. They are the largest DEX and allow for incredibly low fees. Currently, they are the defacto official DEX of the Ethereum blockchain, so, given that, they will try to expand further beyond just an AMM. In the next few years, they will probably expand in the DeFi space, creating smart contracts for lending and borrowing. They may also implement short selling and other functionality that centralized exchanges provide.

The fact that Uniswap is the largest DEX, they have immense control over the pricing of tokens. For example(hypothetical and theoretical), if a liquidity pool provider owns a large share of the pool of USDC-USDT. They could remove their liquidity, thereby giving themselves back an equal share of USDC and USDT. Then they could use all of their USDT in and swap it for USDC, thereby increasing the price of USDC in terms of USDT. That would have a ripple effect on other DEXs, and for a short time, will allow for stablecoin arbitrage between DEXs. That is one problem with DEX's, however, UNI holders could see this exploit and vote to implement a maximum deposit allowance for LP tokens. So in effect, the UNI token and its holders have the power to implement risk policies that can safeguard the entire crypto market.

In the white paper, it was very surprising to see mathematical calculations for liquidity, liquidity curves, etc. In my experience, this is the exception to the rule when it comes to white papers in the crypto space, where instead the layout is in plain terms of what their application does. They also provide differences between the V2 and V3, showing the increase in efficiency and value that the new version provides.