CalmDAO: The Decentralized Reserve Currency for Transactions in Web3.0

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Abstract. DeFi 2.0 has shown a novel tokenomics that enabled protocols to achieve exponential growth. However, due to the lack of a long-term goal and transparency, such technique (1) leads to a short-term pump-and-dump scheme, (2) debases the stability of the protocols, (3) may weaken the morals of teams running those protocols, and (4) perils the trust between protocols and their users. In this paper, we present CalmDAO, the DeFi 2.0 protocol that focuses on long-term growth with transparency in the protocol management and integrating with various transactions in Web3.0.

Keywords: DeFi 2.0 · NFT · Minting · Staking · APY

1 Introduction

Since the launch of OlympusDAO in March 2021, the DeFi industry has faced a new golden age. Its revolutionary tokenomics based on Protocol-Owned Liquidity (POL), (3, 3) staking and bonding, and active treasury management attracted more than \$1,000,000,000 Total Value Locked (TVL) within a few months of its launch [2]. More than 50 forks of OlympusDAO have emerged in 2021 and many of them were able to attract multi-million dollar TVL.

However, those forks focused not on growing the protocol for the long term, but on maximizing revenue as fast as possible by advertising unreasonably high Annual Percentage Yield (APY), only to dump their tokens soon after the pump. For example, there were many protocols that guaranteed more than 1,000,000% or even 10,000,000% APY, attracting short-term pump from a large number of people that led to an increase in the token price. The team then minted a number of tokens, sold them in the decentralized exchange, made a lot of money, and the token price sharply declined. As a result, most of the users lost their money and trust in DeFi 2.0.

Most of those forks, even OlympusDAO, demonstrated three limitations: (1) The team is anonymous so it could not build trust with the users. (2) Tokenomics is not fully transparent - users don't know how much the team takes and how much investment they raised from VCs. (3) High APY doesn't work anymore.

Contributions

• We propose CalmDAO, the decentralized reserve currency for transactions in Web3.0. Our CALM token will conservatively follow tokenomics

of DeFi 2.0 and it will have use cases in real-world applications. Our protocol has four different characteristics:

- Minting. The users can mint CALM tokens at a discount compared to the market price of CALM, with 5-day vesting. 100% of minting revenue goes to the CALM treasury, which'll be used for providing liquidity to the liquidity pool, putting funds in yield aggregators, and purchasing other assets.
- 2. **Staking**. The users can stake CALM tokens to receive staking profits. Staking APY will remain fairly stable at 3-digit or 4-digit.
- 3. Active treasury management. We'll add liquidity to the liquidity pool to collect the liquidity provider fees, stake funds in yield aggregators, and purchase other assets like ETH, LUNA, etc.
- 4. **Real-world applications**. Starting with the integration with NFT marketplaces and artists, CALM will be used for various transactions in Web3.0.
- **Transparency**. We reveal ourselves (e.g. doxx) and our wallet addresses [1]. For any transactions except for testing the dApp, we'll let you know in advance on Discord.
- **Integrity** We reveal how many tokens are assigned to the team and investors, if we choose to raise VC funds for auditing smart contracts, growing the team, etc
- Long-term growth Our motto is "The earlier, the better, but it's never too late to join us". For anyone participating in CalmDAO at any stage, we'll meet every single one of you via zoom call to get to know you, hear your feedback, and reflect your suggestions to our product.

2 Tokenomics

Tokenomics is simple and straightforward (Figure 1). 87% of the total supply of CALM will be owned by users and 13% will be owned by the team. The team's shares are vested according to the total supply of CALM at a given period so that no one can dump CALM. For example, if the total supply of CALM is 10,000 today, 1,300 are vested for the team.

If we choose to raise funds from VC or other investors, (1) we will communicate with you in advance on our Discord, and (2) it will be paid out from 13% assigned to the team, so your shares in CalmDAO won't get diluted. In addition, the team will cover costs of auditing smart contracts, expanding the team, and marketing from our shares in tokenomics.

Lastly, CALM is a governance token that grants voting and management power to you once we transition into a DAO.

CalmDAO Tokenomics

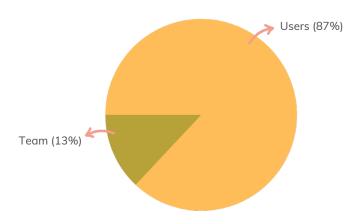


Fig. 1. CalmDAO Tokenomics. 13% assigned to the team includes outside investments, costs of auditing smart contracts, and other operational costs.

3 Method

3.1 Minting CALM

Minting is a cheaper way to buy CALM and the value accrual strategy of Calm-DAO. In return for selling your stable coins, the CalmDAO protocol will give you CALM at a discount, with 5-day vesting (Figure 2) [3].

Minting discount will depend on staking APY, since the user will decide between buying CALM at the decentralized exchange and staking it for 5 days versus minting CALM at a discount and waiting for 5 days to retrieve it. Calm-DAO will adjust the minting price so that users can benefit from minting as much as possible.

3.2 Staking CALM

Staking is the profit distribution mechanism of CalmDAO. To stake CALM, you can go to our website and select "stake". You'll send your CALM to the staking contract and receive sCALM at a 1:1 basis. sCALM is is a transfer-restricted rebasing token and is not meant to be traded or used for anything except holding. To unstake CALM, you can go to our website and select "unstake". You send sCALM back to the staking contract and receive your CALM and staking profits [4].

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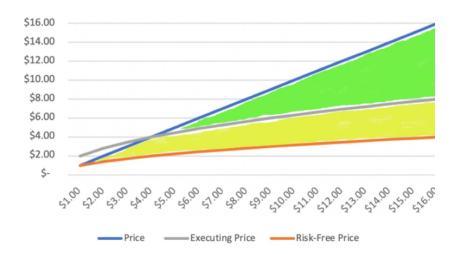


Fig. 2. The green area is the minter's profit. The yellow area is the protocol's profit [3].

Staking APY will remain fairly stable at 3-digit or 4-digit. It is calculated by the total CALM supply, the total CALM staked, and the reward rate. Staking rebase happens every 8 hours, so 1095 = 365*3.

$$APY = \left(1 + \frac{CALM_{totalSupply} * rewardRate}{CALM_{totalStaked}}\right)^{1095}$$
 (1)

3.3 Active treasury management

Our biggest focus is to increase the treasury balance. We will utilize the four revenue streams to increase the treasury balance. (1) Let users mint CALM and CalmDAO receives stable coins like DAI. (2) Earn liquidity provider fees from the protocol-owned liquidity. (3) Stake in yield aggregators. (4) Purchase other assets like ETH, LUNA, etc.

The other important part is transparent treasury management. We have revealed the addresses of the treasury owner (e.g. the multi-sig address) and 3 signers, so users can monitor the treasury management at any time [1]. In addition, we'll communicate with the users before we purchase any assets with the treasury.

3.4 Real-world applications

CALM token will be used for digital and real-world transactions. We'll first integrate with NFT artists and marketplaces.

NFT artists will be able to wholesale CALM tokens by buying them at the minting price if they buy more than 100 of them. And then they can distribute

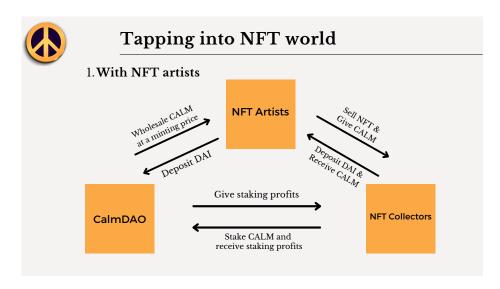


Fig. 3. CalmDAO integration with NFT artists.

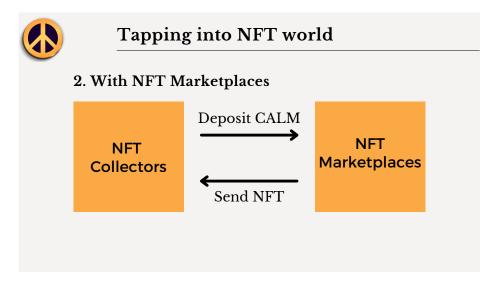


Fig. 4. CalmDAO integration with NFT marketplaces.

CALM tokens to buyers as a reward when selling their NFTs. Buyers will receive CALM tokens and stake them on our website (Figure 3).

We'll also partner with upcoming NFT marketplaces in Polygon so that NFT buyers and sellers trade their NFTs with CALM (Figure 4). In the long run, we envision CALM tokens to be integrated within the NFT gaming ecosystem and even within the real world transactions.

4 Conclusion

We have presented CalmDAO, the decentralized reserve currency for transactions in Web3.0. CALM will become the most stable rebase token in DeFi 2.0, with the real-world use cases in different domains.

The integrity of the team, transparency in the management, long-term growth plan, and ability to run the DeFi 2.0 protocol will make CalmDAO become the true reserve currency in Web 3.0.

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