

Welcome to the UCASH documentation!

UCash is an open-source, permissionless algorithmic stablecoin.

The UCash protocol is a fork version from Basis Cash, initially released as a lightweight implementation on the Ethereum blockchain.

Adding ideas and innovations, the UCash team has made modifications to the original mechanism outlined with its whitepaper. Read on for further details.

Background

The price volatility of cryptocurrencies is a major blocker for mass adoption. Their rapid change in fiat-denominated value causes payment values to vary even during settlement times, being highly inconvenient to merchants that handle them.

Stablecoins are cryptocurrencies with an exchange rate peg with existing fiat currencies (such as the United States dollar) or a fiat-related index, thereby drastically increasing their usefulness as a payment medium.

Algorithmic Central Banks

Although there exists a wide variety of stablecoin mechanisms, UCash specifically uses an "algorithmic central bank" approach to manage the supply of tokens according to a predetermined logic. The algorithm is in charge of balancing stablecoin supply to fluctuating demand, ensuring that the token price remains relatively stable. Further details are available under the price remains relatively stable. Further details are available under the Mechanisms section.

Tokens

UBC - Your Base Cash

UBC tokens are designed to be used as a medium of exchange. The built-in stability mechanism expands and contracts their circulating supply, maintaining their peg to the USDT (which roughly trades near the United States Dollar). USDT is the most liquid stable coin on the market, and it is anchored to 1 U.S. dollar.

UCS - UCash Shares

UCS loosely represent the value of the UCash network. Increased demand for UBC results in new UBC tokens to be minted and distributed to UCS holders. Holders of UCS tokens can claim a pro-rata share of UBC tokens accumulated to the Boardroom contract.

Melter

The Melter exists to encourage the burning of UBC. UBC burned through the Melter will enable users to get more UBC as a reward. It's not allowed to burn when the UBC price is higher than $(1-\epsilon)$ USDT.

In addition, as the price of UBC is likely to experience significant volatility during its phase of initial distribution (first 3 days), the Melter is planned to start after the initial issuance (starting from the 6th day of issuance). This is to allow enough time for the UBC market to stabilize, after which the agreement will effectively use the stability mechanism to prevent further price fluctuations.

Boardroom

The Boardroom allows UCS holders to claim excess UBC minted by the protocol. Holders of UCS can stake their Shares to the Boardroom contract, which by doing so, they can claim a pro-rata share of UBC tokens assigned to the Boardroom.

stability mechanism

The UCash protocol is designed to guarantee UBC tokens to be exchanged at a value of a single US dollar, with the stabilizer (in-protocol stability mechanism) in charge of matching the supply of UBC to their demand.

Every 24 hours, the time-weighted average of the UBC-USDT exchange rate is read from the Uniswap v2 contract, which is then fed into the UCash protocol to be referenced by its stability mechanism.

The stability mechanism is triggered whenever the price of UBC is observed to be above / below $(1 \pm \epsilon) \text{USDT}$ where ϵ is a parameter that defines the range of price stability for the UBC token. On launch, ϵ is set to be 0.05.

Contractionary Policy

When $2H\text{-TWAP}$ is less than $(1 - \epsilon) \text{USDT}$, Contractionary Policy will start. In the Melter, the maximum limit of UBC that can be burned is $(1 - \text{TWAP}) * \text{TotalSupply}$. Only users who stake UCS shares in the Boardroom can participate in the burning, and the allowable amount of burning every two hours is the product of your Boardroom ratio and UBC's TotalSupply. If 1 UBC burned, $1/\text{TWAP}$ UBC will be minted, but the new UBC will be locked until TWAP price above $(1 + \epsilon) \text{USDT}$.

Expansionary Policy

When TWAP above $(1 + \epsilon) \text{USDT}$, Expansionary Policy will start. In the Boardroom, the number of UBC minted is $\text{Totalpool} * (\text{TWAP} - 1)$. All UCS staked in the Boardroom will get the minted UBC in proportion. Totalpool represents the total amount of UBC in the UBC-USDT pool (subject to the value returned at 12:00UTC every day). TWAP is the 24-hour time-weighted average price returned by Uniswap.

Launch Strategy

Both UCS and UBC does not have any pre-allocations to neither the founding team, nor any external investors. Shares are instead distributed to community members that perform actions beneficial to the network.

Fair, open distribution of the entire token supply is advantageous to the protocol's long-term success, rewarding those with a stake in the network, instead of investors / speculators targeting short-term profits.

Moreover, distributing UCS rewards provides a strong financial incentive for network bootstrapping, boosting adoption via network effects. For example, rewards given to UBC liquidity providers prevent UBC from becoming significantly devalued, something that can be detrimental for the network.

Token Distribution

The protocol starts with a UCS supply of zero, the entire supply minted purely via community distribution. Initial distribution of UBC are done to those that deposit DAI(MCD), BUSD, USDT, USDC, WBTC, WETH and BAC to the distribution contract. A total of 70,000 UCash tokens are distributed to depositors, with 10,000 Cash tokens distributed per pool, 3 days. Tokens are assigned equally to each pool, and the amount of stablecoin deposits are limited to 20,000 tokens per account, and WBTC deposit is limited to 1 WBTC, WETH deposit is limited to 30 WETH.

Afterwards, a total of 720,00 UCS are distributed to those that provide liquidity to the UBC-USDT Uniswap v2 pair, where users can deposit UBC and USDT tokens to the distribution contract and earn UCS tokens. Distribution starts with 4800 UCS distributed every day, and the amount of daily seigniorage is reduced to 80% every 30 days (e.g. 384 UCS daily distribution starting from the 31st day).

Further distribution of UCS are given to liquidity providers of the UCS-USDT Uniswap v2 pair, and a total of 180,00 UCS are distributed. Distribution starts with 120 UCS distributed every day, and the amount of daily seigniorage is reduced to 80% every 30 days (e.g. 96 UCS daily distribution starting from the 31st day).

One-Click Mining Functions (Invitations)

Our team is developing and testing one-click mining functions. In order to make it easier for users to enter DEFI mining, this function only supports the UBC-USDT mining pool in the early days. It will be expanded to other projects later. This feature will charge a 1% commission, and an encrypted invitation link will be generated based on the wallet address, and the inviter will receive half of the commission.