

# Home

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 **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 Stablecoin token (which roughly trades near the United States 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.

## Stakingroom

The Stakingroom exists to encourage the stake of UBC. UBC staked through the Stakingroom will allow users to return more UBC as a reward. Staking is not allowed when the UBC price is lower than 1 USDT.

In addition, as the price of UBC is likely to experience significant volatility during its phase of initial distribution (first 3 days), the Stakingroom 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.

## **Stabilization 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 stabilization mechanism is triggered whenever the price of UBC is observed to be above / below  $(1+\epsilon)$  USDT where  $\epsilon$  is a parameter that defines the range of price stability for the UBC token. On launch,  $\epsilon$  is set to be 0.05.

## **Contractionary Policy**

When the price of TWAP is lower than  $(1-\epsilon)$  USDT, more UBC can be minted by staking UBC in the Stakingroom. However, this part of the staked and the newly minted UBC will be temporarily locked until the TWAP price is higher than  $(1+\epsilon)$ USDT, they will be completely released. The number of newly minted ubc is:  $(1-TWAP)/TWAP$ \*the total amount of your staked.

## **Expansionary Policy**

If the price of UBC is observed to be higher than  $(1+\epsilon)$  USDT, the system mints  $totalPools * (oracleTWAP - 1)$  number of new UBC tokens. The issued UBC is deposited to the the Boardroom.

If the price of UBC is observed to be higher than  $(1+\epsilon)$  USDT, the system mints

totalPools \*(oracleTWAP-1) number of new UBC tokens. The issued UBC is deposited to the the Boardroom. The freshly minted UCash is given to the Boardroom contract.

## **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 BTC deposit is limited to 1 wbtc, WETH deposit is limited to 30.

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 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).

## Menu Bar

### Stakingroom

The Stakingroom contract handles dividend claims from stake UBC.

### Boardroom

The Boardroom contract handles dividend claims from UCS holders