MakerDAO

A decentralized autonomous organization for the Dai stablecoin

MESSARI

MakerDAO plans to keep the value of Dai to one U.S. dollar using external market mechanisms and economic incentives, potentially offering a viable alternative to centralized stablecoin tokens, such as Tether.

The platform is a currency token network that aims to keep its value stabilized against that of the U.S. dollar. The network uses two tokens, Dai, which is the stable asset, and Maker, which is a decentralized autonomous organization (DAO), that seeks to control the price of Dai.

Project Overview

Name	MakerDAO
Issuer	Dai Foundation
Category	Currency
Sector	Currency
Sale Start	N/A
Sale End	N/A

Token Overview

Name	Maker
Symbol	MKR
Type	ERC20 token
Initial Distribution	N/A
Current Supply	618,228
Max Supply	1,000,000
Emission Type	Variable

Token Overview

Name	Dai
Symbol	DAI
Type	ERC20 token
Initial Distribution	Dynamic
Current Supply	20,051,842
Max Supply	50,000,000
Emission Type	Variable

Project Background

Dai is a currency token that seeks to maintain price stability against a specific peg, currently the U.S. dollar, to make it suitable for short-term and medium-term use as a unit of account and store of value. Tokens with these characteristics are commonly referred to as stablecoins.

While fiat currencies like the dollar offer relatively low volatility, they are controlled by central parties like the Federal Reserve Bank and rely on the health of the local banking system for commercial use. Many users of cryptoassets consider user control and minimal volatility to be the holy grail of not just digital currencies but any currency. The maker project is seeking to reach this goal through the creation of the Dai token.

The network consists of two components: Dai, which is a collateral-backed currency token whose value aims to be stable relative to the US Dollar, and Maker, a smart contract platform built on Ethereum that backs and stabilizes the value of Dai. Maker achieves this stability through a dynamic system of collateralized debt positions (CDPs), autonomous feedback mechanisms, and incentivizes for external actors.

Maker allows anyone to leverage their Ethereum assets to generate Dai tokens on the Maker Platform. Once generated, Dai can be used in the same manner as any other cryptocurrency; it can be freely sent to others, used as payments for goods and services, or held as long-term savings. The MakerDAO system allows for Dai tokens to be pegged to the price of any asset, as decided by the networks underlying governance.

MakerDAO

A decentralized autonomous organization for the Dai stablecoin

MESSARI

Technology

The MakerDAO system relies on two distinct tokens to create the Dai credit system. The Dai token (DAI) is a free-floating currency that is backed by collateral and pegged, currently, to the U.S. dollar. The Maker token (MKR) is a token that derives its value from the interest payments, called stability fees, which are paid by borrowers that create Dai tokens. MKR also plays the important role as the basis for governance decisions in the network.

The Dai credit system acts similar to a decentralized lender, allowing users to lock up collateral in smart contracts and borrow DAI. A user that wishes to transact in DAI would send a specific amount of ETH to a contract which creates a collateralized debt position (CDP). Users can withdraw DAI from the contract at any time and similar to a line of credit, it is not required to withdraw the entire balance immediately. To retrieve collateral users repay the balance of DAI which they withdrew, along with an interest payment, called a stability fee, denominated in MKR.

To hedge against a decline in the price of collateral users must overcollateralize these contracts. Currently, the network requires collateral of greater than 150% of the dollar value of the DAI borrowed. If the value of the collateral falls below 150% the CDP could be liquidated. This starts an auction process in which the assets of the CDP are sold in order to pay off the outstanding DAI loan balance, stability fees, and penalty fees.

Holders of Maker tokens play two important roles in the MakerDAO system. First, they govern the network by voting on which types of collateral can be used, how much collateral must be posted, and any other changes to the network. Second, they act as a backstop in the case that collateral collapses before CDPs can be auctioned. In this extreme event new MKR tokens are created and sold off in order to stabilize the system. Maker token holders are incentivized to keep the network strong to avoid diluting their holdings.

Third party network participants, known as "keepers" help maintain the price of DAI. Keepers are generally automated programs that take advantage of arbitrage opportunities to keep DAI nears its peg. They also participate in CDP auctions ensuring the orderly winddown of liquidated contracts.

To allow the Maker platform to run in a decentralized manner a series of oracles are used to provide price data to smart contracts. Oracles provide information directly to contracts which can track the value of collateral, the target rate for DAI, and enforce liquidations for CDPs.

Distribution

There are currently 1 million MKR tokens outstanding, but the supply can fluctuate based on the performance of the system. New tokens can be created in the rare event that collateral levels decline sharply and auctions are not sufficient to pay back all outstanding DAI.

In Dec. 2017 Maker announced that it had sold $12 million of MKR to a group of investors led by Andreessen Horowitz and Polychain Capital.[1] Currently around 60% of the total supply has been distributed with the remaining 40% held by the foundation.

The max supply of DAI tokens is 50 million with a current outstanding supply of approximately 20 million. New DAI tokens are created when a user withdraws from a CDP and are burnt when the outstanding balance is repaid.

Team

Rune Christensen
CEO and project lead

- Co-founder of Try China

- Started working on MakerDAO in 2015

Matt Richards
President

- Previously Marketing Director of Audience Science and Playdom

---

[1] Source: https://medium.com/makerdao/maker-sells-12m-of-mkr-to-partners-led-by-andreessen-horowitz-and-polychain-capital-68b2b26548

MakerDAO

A decentralized autonomous organization for the Dai stablecoin

MESSARI

Advisors

L4 Ventures
Building the Stable fund, an investment partnership to help startups use the Maker platform

Polychain Capital
Long-only blockchain hedge fund

1confirmation
Crypto fund founded by Nick Tomaino and backed by Peter Thiel, Marc Andreessen, and Mark Cuban

Investors

1confirmation

Polychain Capital

Andreesen Horowitz

Distributed Capital Partners

Scanate

FBG Capital

Wyre Capital

Walden Bridge Capital

Resources

Website

GitHub

Twitter

Chat

Reddit

Medium

Additional Resources

- [Maker for Dummies](#)
- [Stablecoins: A Holy Grail in Digital Currency](#)
- [Maker Dai Beginners Guide](#)

- [Soundcloud: MakerDAO](#)