

Abstract

In the world of traditional finance, individuals or organizations can borrow money from financial institutions such as banks and in return, they have to deposit something of value that acts as a security deposit against the loan amount. Although such systems have existed for a long time, not everyone can access these financial services as they often require credit checks and background verification processes that every individual or a small-to-medium enterprise may not pass.

With the emergence of Blockchain technologies such as Ethereum, which forms a secure peer-to-peer network of nodes, it is now possible for any individual to access similar financial services, thus eliminating the need for any middlemen. Smart contracts are the backbone technology that enables these financial services which are decentralized in nature, unlike traditional financial services that are controlled and managed by a closed group of people.

MakerDAO is a peer-to-peer organization built on the Ethereum network that enables anyone to lend and borrow money in the form of cryptocurrencies. The organizations built on this peer-to-peer network are termed Decentralized Autonomous Organizations. Smart contracts govern the loan and borrowing process. The loan is offered based on an over-collateralized scheme where the borrower has to deposit an asset, the value of which is almost double the amount of amount being borrowed to secure a loan.

MakerDAO previously supported only Ethereum-based cryptocurrencies as a security deposit to take out a loan in the form of Dai. Dai is a cryptocurrency having a value equivalent to one US Dollar. Their efforts are now towards integrating real-world assets such as real estate, credit invoices, and luxury cars into the MakerDAO ecosystem that act as collateral against the loan amount being borrowed. In this work, we will explore the possibility of using equities as collateral in the MakerDAO ecosystem, against which any entity can borrow Dai.