Twitter Thread by Emin Gün Sirer



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Another #FreeLoveFriday. So far, I've covered Bitcoin, Mastercoin/Omni, and last week ChainLink and the importance of decentralized oracles. Today, let's talk about one of the most fascinating projects in crypto - @MakerDAO

> Back with another #FreeLoveFriday. Last time, we covered how Mastercoin/@Omni_Layer pioneered digital asset issuance on blockchains. Today, let\u2019s discuss @Chainlink and the vital role it plays in connecting blockchains to the real world. https://t.co/0poYIBtGrt
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> — Emin G\xfcn Sirer (@el33th4xor) January 22, 2021

In my thread about Mastercoin, I briefly touched on the vital role fiat-backed stablecoins play in crypto markets, but there's a catch with them:

The counterparty risk of a third-party holding fiat in reserves.

Enter MakerDAO, which set out to create a decentralized, collateral-backed cryptocurrency, DAI, that would be "soft-pegged" to the U.S. Dollar using the power of algorithms. In crypto tradition, its supporters said trust game theory, not operators.

In 2017, MakerDAO published a whitepaper describing a system where anyone could create DAI by leveraging ETH as collateral to create Collateralized Debt Positions. Essentially, you take out a digital USD loan against your crypto.

The game theory of the system is structured such that DAI issuance is controlled to keep the price pegged to $1.00. In essence, it buffers the fluctuations of the underlying collateral to create a synthetic dollar bill.

This obviates the need for a backing bank, or fiat in reserve, or any kind of dependence on fiat, save as a unit of account.

In 2019, the project innovated further to accept forms of collateral beyond just ETH. Now, there's a whole ecosystem built on MakerDAO's governance, including the DAI stablecoin, collateral vaults, and oracles.

While DAI seems to be similar to USD, it offers advantages that fiat cannot match. Namely, it is trivial to send even large quantities. No need for costly and slow bank transfers. So that's why the price for DAI sometimes even exceeds its peg of $1.00.

Admittedly, it took me a while to understand exactly how Maker works -- our paper on the taxonomy of stablecoins sheds some light on its internals. It's always amazed me how stable DAI has stayed over the years.
https://t.co/Pz3BkJLUM7

My greatest worry about algorithmic stablecoins like DAI had been the game theory. They work well as long as demand has them operating at or above $1.00, but the dynamics of when they fail are not well understood.

But last March, we saw that the biggest threat to the stable value of DAI isn't governance, but the constraints of its underlying network.

As the Covid-19 pandemic triggered a meltdown of the traditional financial markets, a liquidity shock rang throughout the crypto markets. Ethereum network fees were outrageously high, and that's if you could get a transaction confirmed.

You'll recall, DAI is a collateralized product. If you can't sufficiently re-capitalize your position as the price of your collateral plummets, the Maker contract follows its rules and liquidates your position.

It was sad to see people losing their money & being turned away from crypto. It was also disappointing to see an innovative project take a reputational hit for circumstances that were out of their immediate control.

I'm certain that the MakerDAO ecosystem will continue to innovate and seemingly make magic happen with math. I'm also curious to hear what you all and @RuneKek want to see built around MakerDAO next.