

The sceptics have plenty of fodder. The earliest adopters of Bitcoin, the original cryptocurrency, used it to buy drugs, while cyber-hackers now demand their ransom in it. Hundreds of million of dollar of Ether, another digital money, were stolen this year after hackers found a bug in some code. Many “believers” are in reality trying to get rich quick from the global mania that has seen the value of crypto assets reach \$2.2 trillion USD.



"I've backed into our bank account."

The crooks, fools and proselytizers are off-putting. Nevertheless, the rise of an ecosystem of financial services ices, known as **decentralized finance** of “**DeFi**”, deserves sober consideration. It has the potential to rewire how the financial system works, with all the promise and perils that entails. The proliferation of innovation in DeFi is akin to the frenzy of invention in the early phase of the web. At a time when people live every more of their lives online, the crypto-revolution could even remake the architecture of the digital economy.

DeFi is one of three tech trends disrupting finance. Tech platform firms are muscling in on payments and banks, and governments are launching digital currencies. DeFi offers an alternative path, which aims to spread power, not concentrate it. To understand how, start with block chains, vast networks of computers that keep an open, incorruptible common record and update it without the need for a central authority.

Bitcoin, the first blockchain (created in 2009), is now a distraction. Instead, Ethereum, a blockchain network created in 2015 upon which most DeFi application are built, is reaching critical mass. Its developers view finance as a juicy target. Conventional banking requires a huge infrastructure to maintain trust between strangers, from clearing houses and compliance to capital rules and courts. It is expensive and often captured by insiders: think of credit-card fees and bankers’ yachts. By contrast, transactions on a blockchain are trustworthy, cheap, transparent and quick -at least in theory.



Although the terminology is intimidating (fees are “gas”, the main currency is Ether and title deeds over digital assets are known as NFTs), the basic activities taking place on DeFi are familiar. These include trading on exchanges and issuing loans and taking deposits through self-executing agreements called smart contracts. One yardstick of activity is the value of digital instruments being used as collateral: from almost nothing in early 2018 it has reached \$90 billion USD. Another is

the value of transactions that Ethereum is verifying. In the second quarter this reached \$2.5 trillion USD, around the same same as Visa processes and equivalent to a sixth of the activity on the NASDAQ.

Digital libertarians would prefer that DeFi remain autonomous and prefer its current trip down the (metaphorically speaking) financial rabbit hole. Yet to succeed, it must integrate with the conventional financial and legal systems. Many DeFi applications are run by decentralized organizations which vote on some issues. These bodies should become subject to laws and regulations. One suggestion is that that government-issued digital currencies be used in DeFi apps, providing the stability that decentralized finance currently lacks.

Finance is entering a new era in which the three novel but flawed visions of tech platforms, big government and DeFi will compete and intermingle. Each embodies a technical architecture and an ideology about how the economy should be run. As with the internet in the 1990s, no one knows where the revolution will end. But it stands to transform how money works and, as it does so, the entire digital world.

Be safe, be well!

Martin

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