Decentralized Finance | Disrupting But Not Derailing Traditional Finance

Following the surge of interest in decentralized finance (DeFi) since last summer, it remains to be seen whether DeFi will completely transform traditional financial products or simply complement and optimize them.

Decentralized Finance Simplified

What is decentralized finance?

Decentralized finance (DeFi) is a new financial ecosystem that uses smart contracts on blockchains instead of central financial intermediaries to offer financial products and services. It emerged from the cryptocurrency ecosystem. Proponents claim that DeFi will become the new backbone of the future financial system because it has features superior to traditional centralized finance (TradFi). We believe it will complement the current financial system rather than substitute financial service companies.

Products and services have mainly evolved within four different financial solutions: money markets (lending and borrowing), derivatives, exchanges, and insurance. They are decentralized and offered by protocols via smart contracts on a blockchain platform, such as Ethereum. Protocols usually issue tokens to fund the project development of the project, and investors can participate for capital gains, airdrops (equivalent to extraordinary dividends), or yield farming (lending the purchased native token to a certain liquidity pool to earn more of the native tokens).

DeFi investors can use different decentralized applications (dApps) offered by the protocols to make use of products and services. DApps work in conjunction with each other, making it possible to mix and match different products and potentially create new solutions. These act like traditional web applications, with the difference that they live in decentralized smart contracts typically coupled with a Web 3.0 front-end hosted on a decentralized file system. They remove the need for an intermediary to act as a central clearing house for app interactions. Price oracles provide relevant off-chain data for dApps in order to operate properly, the ETH-to-dollar exchange rate being one example.

Proponents claim DeFi offers a fast, low-cost, trustworthy, transparent, and global financial ecosystem. Investors can access dApps from any location at any time (borderless and permissionless) and can rely on agreements that are fix-coded in the underlying smart contract (immutable). While a smart contract offers some safety via immutable contracts, the risk of fraudulent developers or deficient coding cannot be excluded.
Digitalization Of Markets

The current landscape

DeFi tokens helped the crypto market enjoy a massive inflow of new liquidity over the past 12 months. The "DeFi summer" of 2020, when many DeFi dApps entered the market, triggered massive price spikes across cryptocurrencies and tokens. The most common metrics to measure the total size of the DeFi market is total value locked (TVL). It measures the dollar value of tokens invested and locked in DeFi protocols. TVL has increased significantly since July 2020 and surged beyond $100 billion in April 2021. That said, compared with traditional finance, volumes remain negligible.

Stablecoins are an important pillar in cryptomarkets and DeFi. They emerged as a result of excessive price volatility of established cryptocurrencies, such as Bitcoin and Ether. Stablecoins aim to maintain price parity by being pegged to specific assets, usually the U.S. dollar. There are currently about 200 stablecoins, which are backed by fiat currencies, crypto assets, commodities, other financial assets, or by a seigniorage (enabled with a strict governance through an algorithm in the smart contract). Despite some regulatory concerns surrounding Tether, the largest stablecoin, and its 1-1 coverage with the U.S. dollar, we note that the $1 peg has so far remained stable.

Money market protocols enable decentralized lending and borrowing with smart contracts that replace the usual risk functions in TradFi. Lenders receive interest in the form of their deposited token and/or a basket of other tokens including the native token of the protocol, while borrowers can use these funds if they overcollateralize the amount they borrow in the form of other cryptocurrencies.

Decentralized exchanges (DEXs) enable peer-to-peer trading by relying on autonomous smart contracts that execute trades without an intermediary. One of the leading DEXs on Ethereum is Uniswap. Similar to other leading DEXs, it does not use the usual order book model to facilitate trades or set prices. Instead, it employs liquidity pools, such that buyers and sellers swap any two Ethereum-based tokens seamlessly via the underlying liquidity pool provided to the DEX.

Derivative protocols have grown less strongly than DEXs and money market dApps in DeFi. There are a smaller number of projects that allow for the creation of synthetic assets that track the price of an underlying asset, one of them being Synthetix. While still evolving, derivative protocols have vast potential considering the size of the derivatives markets in TradFi. Finally, insurance solutions in DeFi safeguard investors against hacks, glitches, or bugs in smart contracts. Like derivatives, this is also an evolving and growing space in DeFi.

The credit implications

In our view, DeFi is disruptive for financial service companies. At the moment, almost all relate to digital assets. But banks, insurance, and other traditional companies are considering the advantages of smart contracts, and monitor developments in the DeFi market. Ignoring this trend might lead to a wake-up call in the future, although we think this is a few years off given that DeFi is still in its infancy.

Financial services clients might see benefits in blockchain-based solutions and redirect some of their funds to dApp products and services. While most clients might not yet be prepared and willing to use DeFi-based products (such as lending, borrowing, or yield farming), we think that banks should be considering whether to adopt smart contract solutions to complement existing products and services to eventually increase efficiency, tap new revenue pools, and more deeply engage their customer base.

The future will tell whether DeFi will become a transformational force for markets. Regulators and policymakers will likely increase regulation of DeFi given the significant rise in TVL and the powerful technology that could redefine the future of finance. Regulators do not have a strong presence in the DeFi market in most jurisdictions, and mostly lack the frameworks to fully monitor it. Some areas of DeFi present a challenge under existing regulations, which are tailored for a financial system with accountable centralized agents. That said, policymakers must find the right balance between regulation and innovation to steer DeFi growth. We believe this could lead to innovations and more value-add for financial services.

DeFi tokens have supercharged the massive inflow of new liquidity in the crypto market

![Market Shares Of Largest Stablecoins (%)](https://via.placeholder.com/500)

Measured by market capitalization which was about $121 billion as of Aug. 31, 2021. Source: CoinMarketCap.

spglobal.com/ratings