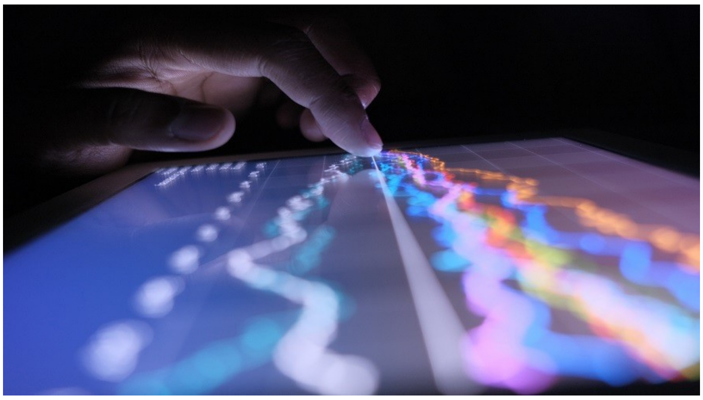
withersworldwide

Decentralized Finance: evolving to optimize investment and maximize returns

17 SEPTEMBER 2020

M. Ridgway Barker
PARTNER | US

CATEGORY:
ARTICLE



M. Ridgway Barker co-authored this article with Joseph Bambara CIPP/US.

As we discussed in an earlier article, DeFi stands for decentralized finance. DeFi is a cryptocurrency movement designed to offer traditional financial products and services without the "centralized" authority of a bank, government, or business. Decentralized finance uses smart contracts and blockchains to provide financial services previously only available from centralized regulated businesses. DeFi platforms provide financial services and products including lending, interest rate arbitrages, or access to products and services involving cryptocurrencies. Instead of traditional third-party intermediaries, users of these DeFi systems interact with smart contracts to obtain services and products.

The DeFi ecosystem categories include infrastructure, know your client ("KYC") / identity, custodial services, payments, investing, derivatives, marketplaces, stable coins, prediction markets, insurance, and credit and lending. A DeFi platform is composable if its existing resources can be used as building blocks and integrated into higher-order distributed applications ("dApps"). Composability leads to rapid and compounding innovation. The fact that most DeFi protocols are open source, i.e., freely available code, developers across the globe can collaborate to create new products leading to innovation, maturation, and a secure network. Composability creates the MetCalfe "network effect", i.e., the value of goods or services grows as the number of users increases. Composability in the DeFi space has given rise to many new products one of the most compelling of which is Yearn.finance ("YFI"). which was officially introduced on 17 July 2020. YFI already has a total market cap of $690 million USD, which was reached at the beginning of September. The YFI price trades more than 700% higher since the July start. DeFi continues to outperform the rest of the crypto market. DeFi now holds around $8 billion worth of crypto assets and has started attracting mainstream investors as well.

YFI is a DeFi yield aggregator, i.e., a suite of lego-like DeFi products and the accompanying user experience ("UX"). It is focused on creating an intuitive UX to generate high risk-adjusted returns for depositors of various assets via best-in-class lending protocols, liquidity pools, and community-made yield farming strategies on Ethereum. Yield aggregation refers to investing using the most current optimal strategy to maximize returns. The optimal strategy is constantly changing. Yearn is similar to the roboadvisor products offered by Vanguard, Wealthfront, and Betterment.

YFI offers aggregated liquidity and automated marketing making ("AMM") by moving providers' funds between other DeFi platforms, including Aave, Compound, among others. YFI is also the native token for the yearn.finance platform and ecosystem. Users can earn YFI tokens by offering liquidity to yearn.finance's liquidity pool. The earned tokens may be used by the holders to take part in governance-related decisions on the platform. Yearn offers a suite of yield aggregation products.

The Yearn Finance's core products are 'vaults' that seek the best returns for yield farmers and a set of ancillary tools to support the process.

Vaults which are community-developed yield farming robots yVaults follow a strategy designed to maximize the yield of the deposited asset and minimize risk. It is a so-called "robo-adviser" for yield. Vaults let users hold an asset while also earning yield on it. Users deposit the asset somewhere and then Yearn borrows stablecoins against the asset. The stablecoins are then used to seek yield-farming opportunities, constantly rebalancing as opportunities shift. The fee passed onto the user is 0.5% for withdrawals and 5% for gas subsidization.

Earn performs profit switching for lending providers, e.g., moving funds between DeFi protocols Aave and Compound autonomously. Earn's yield-aware dynamic money markets serve as building blocks for yVaults. As Earn has grown in size it finds the highest yield pool on Compound or Aave. Earn regressively estimates the optimal allocation as that changes constantly because other users are going in and out of these lending providers directly. On Earn, users deposit any of several stablecoins: DAI, USDC, USDT, TUSD, sUSD, and wBTC. Yearn will look for the DeFi platforms on which they can earn the highest yield.

Zap is an API for Zapper.fi which enables users to swap between various stablecoins and a basket of interest-bearing stablecoins (yTokens) or pools (yCRV). It saves Ethereum gas fees by Zapping directly into or out of Curve pools from the base assets.

Cover is an API to yInsure pooled insurance which provides coverage against financial loss for various smart contracts and product offerings underwritten by Nexus Mutual which allows users to hedge smart-contract risk on Yearn.

APR is a webpage and API that provides a view to returns from depositing various assets into various products.

Governance The Yearn ecosystem is controlled by YFI token holders who submit and vote on proposals that govern the ecosystem. If a proposal is passed by a quorum of YFI holders, it is implemented. A portion of those profits goes to proposer. Proposals that meet quorum requirements, i.e., more than 20% of the tokens staked in the governance contract and generate majority support, i.e., more than 50% of the vote are implemented by a nine-member multi-signature wallet. The multi-signature ("multi-sig") configuration is commonly used by cryptocurrency exchanges to ensure changes cannot be made by a rogue member. Changes must be signed by six (6) out of the nine (9) wallet signers in order to be implemented. The members of the multi-sig wallet were voted in by YFI holders and are subject to change from future governance votes. Indeed, there have been several instances in recent history that have revealed that while DeFi platforms may not be at risk of security breach in the same kinds of ways that centralized platforms are; they certainly aren't completely safe from harm. Many industry participants have voiced concerns. Therefore, it is critical that DeFi platforms like YFI take as many steps as possible toward assuring that their platforms do not have any exploitable vulnerabilities.

To summarize, DeFi and tools like YFI are an experimental risk but also a high-return area of the larger crypto and blockchain space. That said, the DeFi movement is here to stay. There is already a large base of freely available open source dApp code (*see*, the repository @ https://github.com/ong/awesome-decentralized-finance) developed by young entrepreneurs supported by legal teams, quality assurance, and security auditors. In turn, they are bolstered by allies like Coinbase, the San Francisco-based crypto exchange, and valuable gatekeeper to promote self-regulation, and the growth of the industry. The Coinbase legal team is particularly important as they must comply with more laws than any other exchange based in a country other than the US. Some of the legislation that it complies with includes FinCEN, USA Patriot Act, and Bank Secrecy Act. Their legal team does extensive due diligence before listing any tokens. As of September 14, 2020, Coinbase will support YFI tokens that will be available in all of its supported jurisdictions except New York State due to regulatory restrictions. Additionally, Coinbase recently added trading support for DeFi products: UMA (UMA), Celo (CGLD), Numeraire (NMR), Band (BAND), Compound (COMP), Maker (MKR) and OmiseGo (OMG).

Ultimately, DeFi will provide for censorship resistance, worldwide participation, and the elimination of trusted third parties within the financial ecosystem. As it matures, the underlying blockchain infrastructure will provide performant, inexpensive transactions/settlement, immutability of the financial contracts, and execution of smart contracts. DeFi will provide user possession of the private keys needed such that a user can be in full control of their assets without the need for a trusted third-party. The DeFi ecosystem transparency will support and provide price and market efficiency. DeFi will grow via the network effect, as the rise of innovation, performance and resulting participation will elevate a vibrant global ecosystem of financial applications.

Our Withers attorneys can assist and educate clients from a legal and technical standpoint to incorporate these emerging technology trends safely and efficiently to help your businesses stay ahead of the competition. Please contact your regular Withers attorney or the author of this piece with any questions.

Authors

M. Ridgway Barker

PARTNER | GREENWICH

Corporate

+1 203 302 4084

mr.barker@withersworldwide.com