What Is Yield Farming?

By

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Yield farming was the topic of summer 2020 — what exactly is it, and which protocols make use of it?

Yield farming is the practice of staking or lending crypto assets in order to generate high returns or rewards in the form of additional cryptocurrency. This innovative yet risky and volatile application of **decentralized finance (DeFi)** has skyrocketed in popularity recently thanks to further innovations like liquidity mining. Yield farming is currently the biggest growth driver of the still-nascent **DeFi sector**, helping it to **balloon** from a market cap of $500 million to $10 billion in 2020.

In short, yield farming protocols incentivize **liquidity providers** (LP) to stake or lock up their crypto assets in a **smart contract**-based liquidity pool. These incentives can be a percentage of transaction fees, interest from lenders or a governance token (see liquidity mining below). These returns are expressed as an annual percentage yield (APY). As more investors add funds to the related liquidity pool, the value of the issued returns rise in value.

At first, most yield farmers staked well-known stablecoins **USDT, DAI** and **USDC**. However, the most popular DeFi protocols now operate on the **Ethereum** network and offer governance tokens for so-called liquidity mining.

Liquidity mining occurs when a yield farming participant earns token rewards as additional compensation, and came to prominence after Compound started issuing the skyrocketing **COMP,** its governance token, to its platform users.

Most yield farming protocols now reward liquidity providers with governance tokens, which can usually be traded on both centralized exchanges like **Binance** and decentralized exchanges such as **Uniswap**.

The Seven Most Popular Yield Farming Protocols

Yield farmers will often use a variety of different DeFi platforms to optimize the returns on their staked funds. These platforms offer variations of incentivized lending and borrowing from liquidity pools. Here are seven of the most popular yield farming protocols:

1. Compound is a money market for lending and borrowing assets, where algorithmically adjusted compound interest as well the governance token COMP can be earned.

2. MakerDAO is a decentralized credit pioneer that lets users lock crypto as collateral assets to borrow DAI, a USD-pegged stablecoin. Interest is paid in the form of a “stability fee.”

3. Aave is a decentralized lending and borrowing protocol to create money markets, where users can borrow assets and earn compound interest for lending in the form of the **AAVE** (previously LEND) token. Aave is also known for facilitating flash loans and credit delegation, where loans can be issued to borrowers without collateral.

4. Uniswap is a hugely popular decentralized exchange (DEX) and **automated market maker (AMM)** that enables users to swap almost any **ERC20** token pair without intermediaries. Liquidity providers must stake both sides of the liquidity pool in a 50/50 ratio, and in return earn a proportion of transaction fees as well as the UNI governance token.

5. Balancer is a liquidity protocol that distinguishes itself through flexible staking. It doesn't require lenders to add liquidity equally to both pools. Instead, liquidity providers can create customized liquidity pools with varying token ratios.

6. Synthetix is a derivatives liquidity protocol that allows users to create synthetic crypto assets through the use of **oracles** for almost any traditional finance asset that can deliver reliable pricing data.

7. Yearn.finance is an automated decentralized aggregation protocol that allows yield farmers to use various lending protocols like Aave and Compound for the highest yield. Yearn.finance algorithmically seeks the most profitable yield farming services and uses rebasing to maximize their profit. Yearn.finance made waves in 2020 when its governance token **YFI** climbed to over $40,000 in value at one stage.

Other notable yield farming protocols: **Curve**, **Harvest**, **Ren** and **SushiSwap**.

The Risks of Yield Farming

Yield farming can be incredibly complex and carries significant financial risk for both borrowers and lenders. It is usually subject to high Ethereum gas fees, and only worthwhile if thousands of dollars are provided as capital. Users also run further risks of **impermanent loss** and price slippage when markets are volatile. CoinMarketCap has a **yield farming ranking page**, which an impermanent loss calculator, to help you discover your risks.

Most notably though, yield farming is susceptible to hacks and fraud due to possible vulnerabilities in the protocols' smart contracts. These coding bugs can happen due to the fierce competition between protocols, where time is of the essence and new contracts and features are often unaudited or even copied from predecessors or competitors.

Examples of vulnerabilities that resulted in severe financial losses include the Yam protocol (which raised over $400m in days before a critical bug was exposed) and Harvest.Finance, which in October 2020 lost over $20 million in a liquidity hack.

DeFi protocols are permissionless and dependent on several applications in order to function seamlessly. If any of these underlying applications are exploited or don't work as intended, it may impact this whole ecosystem of applications and result in the permanent loss of investor funds.

There has been a rise in risky protocols that issue so-called meme tokens with names based on animals and fruit, offering APY returns in the thousands. It is advised to tread carefully with these protocols, as their code is largely unaudited and returns are whim to risks of sudden liquidation due to price volatility. Many of these liquidity pools are convoluted scams which result in “rug pulling,” where the developers withdraw all liquidity from the pool and abscond with funds.

As blockchain is immutable by nature, most often DeFi losses are permanent and cannot be undone. It is therefore advised that users really familiarize themselves with the risks of yield farming and conduct their own research.

Another article on yield farming from Decrypt

In brief

- Yield farming lets you lock up funds, providing rewards in the process.
- It involves lending out cryptos via DeFi protocols in order to earn fixed or variable interest.
- The rewards can be far greater than traditional investments, but higher rewards bring higher risks, especially in such a volatile market.

It’s impossible to sail the crypto seas without constantly navigating through new trends and buzzwords. One of the latest ones you may have come across recently is yield farming—a reward scheme that’s taken the decentralized finance (DeFi) world by storm during 2020.

Arguably one of the main reasons people are drawn to the DeFi world, yield farming has seen inexperienced investors get burned and tech-savvy capitalists making their fortunes.

As with most things related to **blockchain** and **cryptocurrency**, the concept of yield farming can be intimidating at first, but fear not—we're going to cover everything you need to know below, kicking off with what it is, how it works, and why you might be interested to explore it further.

So what is yield farming and what does it mean for the world of crypto? Without further ado, let's dive in.

What is yield farming?

At its core, yield farming is a process that allows cryptocurrency holders to lock up their holdings, which in turn provides them with rewards. More specifically, it's a process that lets you earn either fixed or variable interest by investing crypto in a DeFi market.

Simply put, yield farming involves lending cryptocurrency via the Ethereum network. When loans are made via banks using fiat money, the amount lent out is paid back with interest. With yield farming, the concept is the same: cryptocurrency that would otherwise be sitting in an exchange or in a wallet is lent out via DeFi protocols (or locked into **smart contracts**, in Ethereum terms) in order to get a return.

Yield farming is normally carried out using ERC-20 tokens on Ethereum, with the rewards being a form of ERC-20 token. While this might change in future, almost all current yield farming transactions take place in the Ethereum ecosystem.

How does yield farming work?

The first step in yield farming involves adding funds to a liquidity pool, which are essentially smart contracts that contain funds. These pools power a marketplace where users can exchange, borrow, or lend tokens. Once you've added your funds to a pool, you've officially become a liquidity provider.

In return for locking up your finds in the pool, you'll be rewarded with fees generated from the underlying DeFi platform. Note that investing in ETH itself, for example, does not count as yield farming. Instead, lending out ETH on a decentralized non-custodial money market protocol like Aave, then receiving a reward, is yield farming.

Reward tokens themselves can also be deposited in liquidity pools, and it's common practice for people to shift their funds between different protocols to chase higher yields.

It's complex stuff. Yield farmers are often very experienced with the Ethereum network and its technicalities—and will move their funds around to different DeFi platforms in order to get the best returns.

It is by no means easy, and certainly not easy money. Those providing liquidity are also rewarded based on the amount of liquidity provided, so those reaping huge rewards have correspondingly huge amounts of capital behind them.

A quick rundown of yield farming

- 💰 Liquidity providers deposit funds into a liquidity pool.
- 💱 Deposited funds are normally stablecoins linked to USD, such as DAI, USDT, USDC, and more.

- Another incentive to add funds to a pool could be to accumulate a token that's not on the open market, or has low volume, by providing liquidity to a pool that rewards it.
- Your returns are based on the amount you invest, and the rules that the protocol is based on.
- You can create complex chains of investments by reinvesting your reward tokens into other liquidity pools, which in turn provide different reward tokens.

What's so special about yield farming?

The main benefit of yield farming, to put it bluntly, is sweet, sweet profit. If you arrive early enough to adopt a new project, for example, you could generate token rewards that might rapidly shoot up in value. Sell the rewards at a profit, and you could treat yourself—or choose to reinvest.

Currently, yield farming can provide more lucrative interest than a traditional bank, but there are of course risks involved too. Interest rates can be volatile, making it hard to predict what your rewards could look like over the coming year—not to mention that DeFi is a riskier environment in which to place your money.

Why should we care?

Over the course of 2020, an insane amount of money has been made (and lost) via the Ethereum network because yield farming platforms are built on Ethereum. And most, if not all, DeFi tools use the Ethereum platform. The explosion of popularity shows the extent to which the financial revolution promised by DeFi is relying on Ethereum—a relatively new network.

ETH

+102800.00%**$730.59**

24H7D1M1YMax

Aug 7Feb 21Sep 6Mar 23Oct 7Apr 23Nov 7May 24Dec 8Jun 23050010001500

ETH Price

Buy Ethereum

Yield farming is important as it can help projects gain initial liquidity, but it is also useful for both lenders and borrowers. It makes the world of taking out loans easier for all.

Those who are making huge returns often have a lot of capital behind them. But those wanting to take out a loan have access to cryptocurrency with very low interest rates—sometimes as low as 1% APR. Borrowers are also able to lock up the funds in a high-interest account with ease.

Though the yield farming explosion has died down somewhat following its Summer 2020 boom, there is still the possibility of earning an outsized yield on assets compared to that seen in the world of traditional finance.

Yield farming has been a somewhat divisive topic in the world of crypto. Not all the community thinks it’s important—and some in the crypto community have advised people to stay away. For example, flash farms (yield farming projects that pop up for just a week or so) have been criticized by Ethereum developers for their high risk. Ethereum co-founder Vitalik Buterin himself has said he will be staying away from yield farming investments.

Which projects are involved?

There are a number of DeFi projects currently involved in yield farming. The biggest right now in terms of value locked into smart contracts is Aave, a project that allows users to lend and borrow a number of cryptocurrencies.

Next up is yearn.finance, which works to move users' funds between different lending and liquidity protocols (Compound, Aave and dYdX) to get the best interest rates.

Then there is Compound, a DeFi platform that allows people to earn money on the crypto they save.

Who can get involved?

Getting involved in yield farming is tricky if you have no previous experience in the crypto world. Projects like Compound and yearn.finance are working to make the world of borrowing and lending accessible to all.

But because yield farming has driven high gas fees on the Ethereum network, those making huge returns from lending their crypto are those who typically have a lot of capital behind them to start with.

What can you do with yield farming?

Top yield farmers have earned as much as 100% APR on popular stablecoins, using a whole host of different strategies.

COMP

-15.62%**$134.06**

24H7D1M1YMax

Jul 14Jul 31Aug 17Sep 3Sep 20Oct 7Oct 24Nov 10Nov 27Dec 1450100150200250300

COMP Price

One strategy involves one of the world's most popular DeFi platforms, Compound. The platform rewards investors with COMP tokens for both supplying and capital borrowing, and many users maximize their returns by doing both:

- Borrowing funds on Compound provides COMP Token as a form of cashback. The more you borrow, the more COMP Token is provided.
- If the cashback is worth more than the cost of the borrowing fees, you can keep on borrowing to farm the cashback rewards.
- Because liquidity miners are compensated for both lending and borrowing, one strategy is to lend the highest interest rate asset, borrow as much as you can against the tokens, and then return the remaining assets back to the lending pool.
- The (potential) end result is 100% APY instead of the 0.01%-1.00% that most banks offer, which is a very substantial increase.

In-depth strategies are beyond the scope of this article, but essentially, the method involves making a deposit, and then borrowing against it. It goes without saying that it's extremely risky; as always, one should never invest what you cannot afford to lose.

Is yield farming sustainable?

As a number of Ethereum developers have told *Decrypt*, certain yield farming projects won’t last and are simply not sustainable.

These projects often raise huge amounts in a short period of time and are then forgotten about. Some have even been described as scams—especially the flash farming projects.

Other yield farming "experiments" have involved experimental—and unaudited—code, which has led to unintended consequences.

Invest at your own risk, tends to be the general consensus from experts.

But DeFi yield farming platforms like those listed above will be around for a long-time. Maybe the same amount of money won't be being made on them in years to come, but the world of loans will be transformed.

The future of yield farming

It's practically impossible to accurately predict the future in such a fast-paced, volatile space. The general consensus, however, is that the lucrative bubble is likely to burst, at some point.

The current levels of hype and expectation could potentially place too much strain on the network, and cause problems with congestion. Any resulting price corrections could result in some farmers being unable to liquidate their assets, which could have a knock-on effect on the overall confidence in yield farming.

Top DeFi 'yield farmers' share their secrets to a profitable harvest

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For now, yield farming remains a high-risk, high-reward practice that might be worth pursuing, as long as the necessary research and risk assessments have been carried out in advance.