

# Yearn Finance, the King Yield Optimizer

By March Zheng, Bizantine Capital Partner  
Re'em Sal, Technical Product Manager (Web3/Defi)

To say that the growth of DeFi in the last year is anything short of exponential would be an understatement. Today, we do the basic but necessary data breakdown of Yearn's growth in the last year. We categorized the growth on a quarterly basis, and visualized just how exponential this uptrend has been. By looking at Yearn protocol's TVL (total value locked) growth in the past fiscal year, you can see how this cycle has played out. There was an exponential irruption phase generated by the introduction of liquidity mining, then a turning point where Yearn technology consolidated the wide spectrum of liquidity mining programs onto its own platform, and finally steady growth and maturity of the optimization for "yield and cash generation" products (e.g. Yearn v2). To put it into perspective within the rules of technological growth, we credit Azeem Azhar from *Exponential Views* for the chart that puts the technological macro framework in perspective.

Crypto markets have only discovered "yield optimization" in the last year or so, and that implies there will be continued iterations of work and development for this specific sub sector. At this point in the "Irruption" phase, there is already a clear winner in the game, a protocol that:

- 1) Aggregates yields across the entire decentralized finance spectrum in a secure fashion - adjustable to smart contract risk
- 2) Can more efficiently generate revenue and profit than any other financial services firm. Yearn's Buyback and Build model (YIP-56), which in Yearn's short lifespan of only a year, is unprecedented in its intended result and value generation.
- 3) A fair launch is important in maintaining transparent trust with the community, where more and more investors resonate with credible neutrality and legitimacy. The wide array of inside games (such as GME, AMC, robinhood drama, etc.) that inevitably befalls on the "small guys" is a sentiment and fact that firmly substantiates this line of reasoning.

The asset is the Yearn Finance token (YFI), where the platform aims to be THE Layer 2 bank that exists on top of Ethereum. Bizantine's thesis view of the crypto landscape is that Ethereum as a technology will become the base module which operates the on-chain economy. Everything built on top of this "Ethereum module" is really just a form of real estate or restaurant that needs the network effects and security which only Ethereum can provide. We are excited to see this thesis play out on the diffusion of

technological cycles, and the visualization of data in terms of TVL and growth would suggest that we are only at the beginning of the true disruption phase. We map out the data progress here, and come to the conclusion that price increase is a derivative of TVL growth.

FY					
	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2
<b>TVL - Start</b>	\$9,681,000.00	\$6,450,000.00	\$1,040,000,000.00	\$448,606,000.00	\$1,818,000,000.00
<b>TVL - End</b>	\$6,585,000.00	\$1,043,000,000.00	\$458,874,000.00	\$1,719,000,000.00	\$3,712,000,000.00
<b>% Change</b>	-32%	16070.50%	55.88%	283.19%	51.02%
	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2
<b>Price - Start</b>	\$0.00	\$790.94	\$22,371.00	\$21,920.91	\$36,369.43
<b>Price - End</b>	\$0.00	\$23,567.09	\$22,623.54	\$34,733.76	\$33,029.07
<b>% Change</b>	0%	2879.63%	1.12%	36.89%	-10.11%

**Data Note:** Even during 2020 Q4 price only had a %1 increase during a %50 decrease in TVL and then after recovering in 2021 Q1 the price has moved a significant increase of ~%40 (In retrospect somewhat covering the percentage lossage in TVL from 2020 Q4)

As Yearn's adoption continues through the lens of TVL growth, investors are starting to see metrics for fundamental valuations that may not yet be captured by the current market price. On a quarter by quarter basis, the total value locked has increased every

quarter. The latter is also a numbers game as well, as more users interacting with the protocol will inevitably help scale the system. The Yearn protocol is a cash flow generating machine based on the statistics (<https://yearn.substack.com/>), and the market does not seem to value the Yearn token as they would for traditional asset management companies. Price for any new technology, especially in an asymmetric asset class, is naturally volatile. But the hard data implying Yearn's consistent TVL growth through all cycles of the market is a metric that seems to be underrated for fundamental valuation. Just like how digital content remains consistent even in a recession economy, the demand for finding yields will always remain. Perhaps all future asset management companies will come to define their fundamentals by this specific metric as well (the consistent ability to generate yield), as opposed to just pure P/E analysis. For the first time within the decentralized finance asset class, there are protocols that are experimental and maturing in technology for a new valuation metric to emerge. Here in our analysis, our pattern analysis is simple (in price vs TVL growth), but it hints at the sentiment dispersion that would help boost the Yearn price on the secondary markets.

From here, YFI's token benefits from two different value accrual mechanisms, growth of TVL from further partnership integrations to open up more yield pools, and the buying of more YFI tokens on the open market by the treasury (<https://gov.yearn.finance/t/yip-56-buyback-and-build/8929>) for more contributor rewards and further protocol initiatives. Strategists and developers on the contributors' end build strategies for yield to both help the AUM grow. They are in turn incentivized by reward fees. The aggregation of yields across the Defi spectrum continues to remain one of Yearn's strongest moat points, as they are able to yield farm any competitor that could arise incentive for users with their native tokens. This means that value and trust would rather accrue to the YFI token as the Yearn protocol benefits from a greater network effect. By being the first mover in a burgeoning market, naturally the risks inherited are more widespread but it's a testament to Yearn's durability and future outlook in withstanding the short term vulnerabilities. Being the first yield aggregator to generate network effects at this level, no doubt Yearn has positioned itself as the prime leader, and has time durability on its side.

A token's value in decentralized finance can be bucketed into two utility categories, which are governance and revenue accrual rights. It is important to first define these categories under the decentralized version of asset management, which is all on-chain as opposed to traditional equity holders for stocks (internal to company issuance). Governance provides utility on Yearn protocol's execution layer, which allows for the initiatives that can better the overall Yearn system. Governance gives rights to on-chain asset management, such as treasury management and the facilitation of token issuance. This is no stranger to YFI's token model, where the token gives certain thresholds of voting power within the YFi ecosystem. As to the category of revenue

category rights, YFI the token is equity that provides rights to propose and vote on management of the revenues and profits that the Yearn protocol will generate. This is the metric, based on our data analysis, that will continue to expand in the future for Defi evaluation, and one that seems to be short term overlooked on a broad market scale. A token's governance drives the initiative factor for protocol execution, and in turn revenue that accrues to the value of the token through these initiatives benefits all token holders long term. As more capital inflows positively affect Yearn's TVL, the YFI token value will thus increase as voting power becomes more impactful even at the level of fractional token holdings. We aim to promote this metric for further valuation down the road, and as a guiding factor in fundamental Defi analysis.

We close on our analysis by circling back to Azeem's chart - noting the installation phase and the deployment phase from irruption to maturity. Assume that there are different cycles of irruption and maturity of certain concepts or phases in the DeFi ecosystem. Irruption to maturity happens in cycles and shows that productive inputs result in outcomes based on growth metrics correlated to adoption and maturity. As further implementation/concepts get introduced, the volatility of irruption to frenzy to synergy will occur in a continuous cycle. Envisioned implementations could mean further developments on the Iron Bank (<https://docs.cream.finance/iron-bank/faq>), and additional yield pools for leveraged DEX trading. It will be interesting to see how the Yearn protocol itself implements the collateral factor for on-chain borrowing, as that function is currently sourced to the Iron Bank. Ultimately, this will all serve to reinforce the on-chain revenue machine that the Yearn Protocol is, and will become the go to system for optimization for Defi users.

Bizantine Capital seeks to invest in on-chain protocols that can redefine the traditional, digital coordination of the world. Our thesis of Ethereum becoming the base layer of the digital economy is especially powerful for asset management, where we believe Yearn Finance can become the blockchain-native bank that aggregates the world's yields, the most important blockchain-based product. The Yearn protocol is transparent, on-chain, and 24-7 to "customer" demands, with no KYC needed to deposit. It is truly a global asset management business. Our assumption centers around the fact that the longer a protocol remains relevant, emanating from its growth in network effects and innovation, the higher the probability that the protocol will be here to stay. With this article here, we spell out our basics for analyzing the surface level data in front of us, and strive for deeper integrations of defi valuation metrics that can be used by all. We conclude quite confidently that the maturing of this asset class will entail more tools for valuation. We are fortunate to have the opportunity to participate in the early stages of this new on-chain economy, and are excited for further iterations that will help the space grow on both the utility and user experience layers.

**Disclosure: Byzantine Capital at the time of publication, holds positions in YFI (Yearn Finance) and ETH. This is not financial advice.**

Source Citations

\*Special thanks to Andrew Bakst (CIO of Byzantine Capital), and Cameron Sepahi for review

\*<https://www.exponentialview.co/>

\*<http://www.iemoji.com/view/emoji/418/smileys-people/crown>

\*Yield Optimization DEFI Pulse

\*Price Data CoinGecko