

Report on Yearn Finance

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Introduction

Yearn Finance is the largest yield aggregator in the Defi segment and ranks 16th among the most profitable protocols^[1]. Through its partner program, Yearn becomes a B2B yield farm for major Defi firms, including Binance, FTX, and Coinbase (Appendix I).

Yearn operates as follow, when customers deposit assets into Yearn's vault, strategists seek the best approach to maximize the yield. As a compensation for providing this service, Yearn charges a 20% performance fee and 2% management fee^[2].

To become a strategist, one can submit strategies for open discussion in Yearn's forum. If a strategy is sound, it will go through a voting process. When it is passed and implemented, the corresponding rewards will be granted to whoever comes up with the strategy. To vote, one must hold YFI, which is Yearn's governance token. Holders of YFI can participate in the governance of Yearn by submitting proposals and voting.

Valuation

1. Identify YFI as a security token: After *YIP-56: Buyback and Build* passed, YFI holders no longer receive dividends on YFI, which means YFI lost its property as a utility token. Also, it doesn't have the property of a cryptocurrency according to the article of Ernst & Young^[3]. The only intrinsic value captured in YFI is through governance^[4], just like shares of stock representing power within a company.
2. Assemble income statements: Select monthly income statements from December 2020 to May 2022. This time interval is chosen, because YIP 56 is passed in January 2021 which changes the basic property of YFI to security token. Assemble three half-year income statement reports from the monthly reports. A 180-day window is chosen since crypto market is highly volatile.
3. Build up a DCF model for valuation:
 - a. Forecast revenue of Vault Dust, vault v1, and vault v2 as moving average of previous periods. (Balance between growth stage and bear market)
 - b. Forecast cost of revenue of gas and strategy fee as moving average of previous periods. (Balance between growth stage and bear market)
 - c. Forecast operating cost of personnel and security as moving average of previous periods. (Balance between growth stage and bear market)
 - d. Forecast cost of revenue of Yearn partners to be constant. (Stable partnership)
 - e. Forecast inverse fed fees, strategy migration, and personal as 0. (Nonrecurring items)
 - f. Forecast other operating expense and other income as 0. (Unforeseeable future)
 - g. Assume the discount rate is 15% and terminal multiplier is 10x. (Standard financial model assumption)
4. Indicated YFI price = Enterprise value / The number of YFI: The indicated YFI price is \$4181.14, very close to the recent spot price of YFI which is around \$4500^[5].

Conclusion

The indicated price is below the spot price of YFI, so YFI is not an ideal investment vehicle right now.

Moreover, timing is always a key factor when making an investment decision. Unlike in 2017, when financial institutions aren't actively involved in crypto market, today a fleet of major financial firms invest in cryptos^[6]. Since the Fed is reducing balance sheet and increasing rates, the policy will definitely affect how these institutions manage risks. To counter Fed's actions, these firm will choose to sell their most risky assets at first, which is crypto. Thus, the crypto market will remain in bearish momentum until the Fed stops quantitative tightening, and the financial institutions finish balancing their risk.

Finally, there are certain risk factors worth consideration within Yearn, such as folk of Yearn, hackers' attack on liquidity pool, and yield strategies exposed to uncontrollable risk. Yearn should implement a risk management system.

If any condition above changes, we should reevaluate our position on Yearn. Because Yearn dominates the yield aggregator segment through its partnership with major Defi firms and high-yield innovative strategies. And the dominance is assumed to persist.

Reference:

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[2] Overview, Yearn Finance, <https://docs.yearn.finance/getting-started/products/yvaults/overview>

[3] The valuation of crypto-assets, Ernst & Young,

https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/emeia-financial-services/ey-the-valuation-of-crypto-assets.pdf

[4] On Value Capture at Layers 1 and 2, Multicoins Capital,

<https://multicoins.capital/2019/03/14/on-value-capture-at-layers-1-and-2/>

[5] yearn.finance to USD Chart, coinmarketcap, <https://coinmarketcap.com/currencies/yearn-finance/>

[6] Institutional Money Is Pouring Into The Crypto Market And Its Only Going To Grow, <https://www.forbes.com/sites/lawrencewintermeyer/2021/08/12/institutional-money-is-pouring-into-the-crypto-market-and-its-only-going-to-grow/?sh=8398bf914598>

Appendix I

Top YFI Holder Addresses		
Name	Ranking	Adderress
Coinbase	2	0xddfAbCdc4D8FfC6d5beaf154f18B778f892A0740
AAVE	3	0x5165d24277cD063F5ac44Efd447B27025e888f37
Binance	6	0xF977814e90dA44bFA03b6295A0616a897441aceC
FTX	7	0x2FAF487A4414Fe77e2327F0bf4AE2a264a776AD2
Binance	8	0x47ac0Fb4F2D84898e4D9E7b4DaB3C24507a6D503
Multicoïn	9	0xC564EE9f21Ed8A2d8E7e76c085740d5e4c5FaFbE
OKEx	13	0x6cC5F688a315f3dC28A7781717a9A798a59fDA7b
Binance	14	0xBE0eB53F46cd790Cd13851d5EFf43D12404d33E8
Sushiswap	15	0x088ee5007C98a9677165D78dD2109AE4a3D04d0C
Binance	16	0x28C6c06298d514Db089934071355E5743bf21d60