PrimeRating

Fundamental Report

Protocol: Harvest Finance
Version: 2.0
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Previous Report: [Link to previous report](#)

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Season/competition: Season 3

Scorecard

1. Value Proposition	Points
a) Novelty of the solution	4 / 15
b) Market fit/demand	8 / 15
c) Target Market Size	8 / 10
d) Competitiveness within market sector(s)	6 / 10
e) Integrations & Partnerships	4 / 15
Total Points - Value Proposition	**30 / 65**
2. Tokeneconomics	**Points**
a) What is the extent of the token's capabilities?	4 / 10
b) Initial token allocation	5 / 15
c) Continuous token issuance & tokenomics	5 / 10
d) Is the value capture model able to accrue and distribute value?	6 / 10
e) Is the token sufficiently liquid to enable active use and trade?	4 / 5
f) Are there any extrinsic productivity use cases?	5 / 10
Total Points - Tokenomics	**29 / 60**
3. Team	**Points**
a) Is the team credible and public? (No, Partly, Yes & Anon , Yes & Public)	0 / 15
b) Does the team have relevant experience?	2 / 10
c) Does the team participate and help shape the public debate?	1 / 5
d) Is the team able to effectively attract and coordinate resources?	5 / 10
Total Points - Team	**8 / 40**

4. Governance	Points
a) Admin Keys	3 / 20
b) Extent of Governance capabilities	4 / 15
c) Active Governance contributors	2 / 5
d) Governance infrastructure	4 /10
e) Robustness of Governance process	2 / 10
Total Points - Governance	**15 / 60**
5. Regulatory	**Points**
a) Does the protocol have any legal accountability?	N/A / 15
b) What is the quality of the legal jurisdiction?	N/A / 10
Total Points - Regulatory	**X / 25**
Total	**86 / 225**

1. Value Proposition

The Value Proposition section describes the value a protocol delivers to its users. Based on the proportion of the problem the protocol aims to solve and the potential of the protocol to effectively solve the problem - better than other industry solutions - a Value Proposition rating is created.

a) Novelty of the solution (15 points)

This score evaluates the novelty (uniqueness) of the protocol. Has the protocol introduced any new innovations that help solve user's problems more efficiently? Is the project a fork? To what extent did they copy/fork the original?

Answer: Harvest Farms is an automated yield aggregator founded in September 2020 by an anonymous team. The project was bootstrapped with no VC funding or premine. While similar to Yearn Finance (which launched one month prior), it is not a fork. In essence, Harvest operates like a passive fund. They focus exclusively on yield aggregation and take care of everything from gas costs to APY tracking, strategy development and auditing. Their strategies are generated by their developers, and underlying assets go through rigorous research prior to inclusion.

They have been one of the top contenders in yield aggregation since shortly after launch. However, no groundbreaking novelties have been introduced. A notable mention is the Council of 69, which makes small investments in startup protocols using treasury funds. Investments are voted on by the community. In conclusion, Harvest Finance is a yield aggregator with no clear distinctions from competing protocols in the same category. There are no technical or organizational novelties.
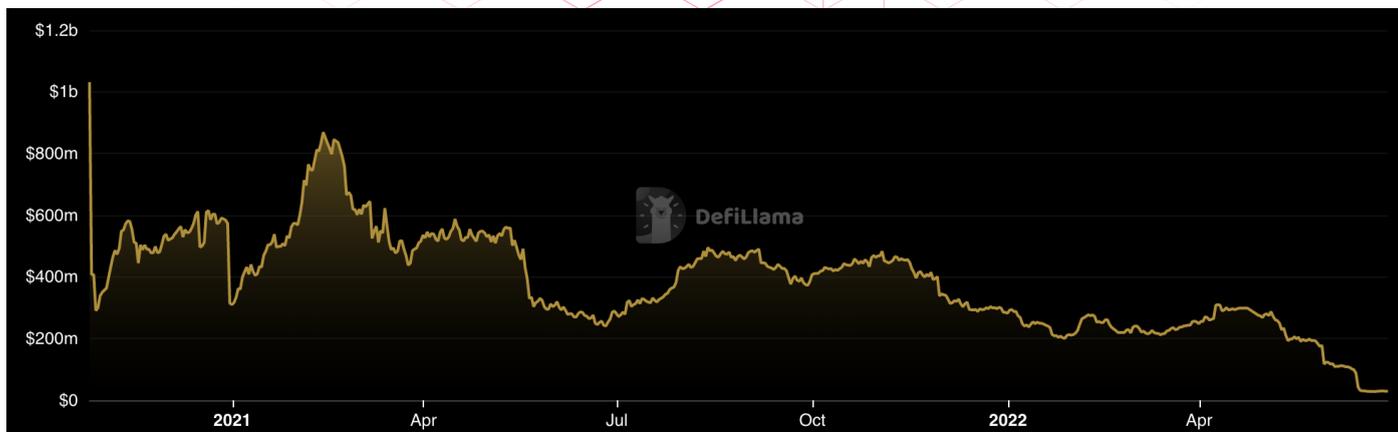
Score: 4

b) Market fit/demand (15 points)

This score evaluates the degree to which the protocol satisfies a strong market demand. The market fit evaluates if the protocol is able to satisfy the needs of a specific market (can also be measured by user adoption/ #of users). To what extent has the protocol proven to meet the demand of a specific market? Is the timing of the product right for the market? Is the protocol targeting the right market?

Answer: Harvest's TVL grew quickly a few months post-launch in 2020, and hit $700M in mid-late October 2020. Their current deposits are $26.8M, a steep decline from previous highs.This decline is seen across the board in DeFi since the market crashed in May 2022 due to the UST depeg and by further contagion throughout June. Measured by TVL, Harvest is ranked the 10th largest yield aggregator by DeFi Llama. A month ago, Harvest was the 5th largest yield aggregator. However, there is only ~$20M difference between 5th and 10th place and the rankings may look radically different should the market sentiment change.

The market cap is $28.3M, down from an ATH of $190M. More than 35,000 users have interacted with the project since launch, and 3,778 users have currently deposited funds in their pools. Harvest makes money on their performance fees on the profits they generate. The current performance fees are 30% for ETH and 8% for BSC. Harvest's quick rise to a leading protocol was indicative of a strong market fit.

With that said, their TVL has not been able to surpass the levels from early 2021. On a positive note, they were able to bounce back from the exploit in October 2021. There are no clear roadmaps for the future. This is either due to lack of transparency from the devs, or simply a lack of vision or desire to evolve. Harvest's TVL since inception is illustrated below:

Source: Defi Llama

In conclusion, Harvest has established a market fit, but it remains unclear whether they can outperform their competitors or regain their foothold going forward.

Score: 8

c) Target market size? (10 points)

The target market size evaluates the current and future size of the problem the protocol is aiming to solve. The category of the Open Finance solution can be used as a reference to the target market (for example: Lending). Because Open Finance is by definition global, the global market for a specific problem equals the target market size.

Answer: Both on an institutional and retail level, lending is one of the cornerstones of decentralized finance. DeFi

collectively has [$63.7B](#) in TVL and a cumulative market cap of [$12.5B](#). According to [Ryan Selkis](#), the founder of Messari, the top 700 global financial firms have a total market cap of approximately $10T. A 10% market share represents a ~158x upside from the current levels. Yield farming is one of the smaller categories within DeFi with approx. [$1.23B](#) in TVL. However, it's closely related to lending which is the second largest DeFi category with [$15.1B](#) in TVL. For this reason, yield aggregation protocols are likely to follow the general DeFi market sentiment. Given Harvest's stagnation in TVL, it remains to be seen whether or not they are able to fully capitalize on the market potential going forward. For that reason it's hard to defend a full score.

Score: 8

d) Competitiveness within market sector(s) (10 points)

This score evaluates the competitiveness of the protocol within the market sector(s) it operates in. This score offers a relative comparison of the protocol and other protocols operating in the same market sector(s). To evaluate this, metrics to directly compare with the competition can be used (e.g. TVL, trading volume, number of users).

Answer: According to [Messari](#), trading volumes over the past 30 days have averaged around $3.5M with a minimum of $598k and maximum of $25.49M. As previously mentioned, Harvest's TVL is $26.8M and market capitalization is $8.3M. Their [GitHub](#) repos are frequently updated. Although security is not a major focus of this report, it's worth mentioning the [$24M](#) exploit that took place in October 2020. This resulted in a major decline in TVL. While they bounced back after the exploit, TVL has remained somewhat stagnant in later times.

See below for comparisons with a selection of competing protocols:

[Yearn Finance](#) ($YFI) has a TVL of approximately [$529M](#) and a market capitalization of $166. Their [Github](#) repos are frequently updated by a top-tier, but semi-anon team of core developers. The protocol runs on Ethereum, Fantom, and Arbitrum. YFI suffered a [$11M](#) exploit in 2021.

[Beefy Finance](#) offers yield optimization strategies involving AMMs, LPs, and other yield farming opportunities across the DeFi universe. It currently has [$234M](#) in TVL and a market cap of $30.4M. Beefy is said to have around [100k users](#). Their [GitHub](#) account shows a healthy level of activity with frequent contributions. No major losses to exploits have been announced.

[APY Finance](#) pools stablecoins and accesses Convex and Curve yields, and has a TVL of [$2.7M](#) and market capitalization of $305k. At the time of writing, their public [GitHub](#) repositories show activity on a monthly basis. No major losses to exploits have been announced.

[DFI.Money](#) (YFII) is a YFI fork created as a response to a rejected Yearn proposal ([YIP-8](#)). The key difference lies in the token emission model. With DFI.Money, token emissions are halved every week, which promotes active participation to mine YFII tokens. At a fully diluted market cap of [$36.4M](#) and TVL of $85k, DFI.Finance has yet to reach meaningful adoption. However, their [GitHub](#) has not seen any significant activity in 2 years. No major losses to exploits have been announced.

YFV Value, which later became [Value DeFi](#) ($VALUE), has $17.3M in TVL. The current market cap is [$1.3M](#). At the time of writing (June 2022), their public [GitHub](#) was last updated 29 days ago. They lost [$7.4M](#) in a flash loan exploit in 2020.

Since Yearn Finance is the benchmark protocol in yield aggregation, it makes sense to compare the two. Harvest offers a wider range of available strategies compared to Yearn, leaning more towards higher risk (and thus higher

APY) opportunities. Examples include their MUSE-ETH vault (270% APY) which is powered by NFTs, and their ORC-ETH (82.6% APY) vault that earns iFarm rewards, ORC rewards, and Uniswap trading fees. Most of Yearn's strategies have a more conservative risk profile.

In terms of user adoption , 38,000+ unique wallets have interacted with Yearn since they launched, versus Harvest's 35,000 unique users. Currently the active wallets interacting with the platforms are 3,245 for Yearn and 3,778 for Harvest. Yearn has lost close to 600 active wallets over the last few weeks, while Harvest's active wallets have largely remained stable.

 Harvest quickly established itself as a contender among yield aggregators, and have been able to hold on to their position since late 2020. However, in the last month they've fallen from 5th to 10th place on Defi Llama's yield aggregator ranking by TVL. As previously mentioned, the difference between 10th place and 5th place is merely $20M, so it's hard to gauge the significance of their current position. Harvest's competitiveness has historically been decent, but I question whether the higher risk vaults will be enough to gain meaningful market share in the time ahead. The lack of transparency around potential product roadmaps also warrants a deduction in score.

Score: 6

e) Integrations & Partnerships (15 points)

Due to crypto's open-source nature, the code of most protocols can easily be forked. This score represents a piece of "unforkable value". Some indicators to look at are the number of applications built on top of the protocol (vertical integration), other entities integrating the protocol's services (horizontal integration) or the number of relevant partnerships (be careful of logo collections/ partnerships without much purpose).

Answer: Harvest Finance lists a few integrations on their website that add to the extrinsic use cases of the FARM and iFARM tokens. Examples are Bancor, Quickswap, Ruler, and Rari Fuse. These will be explored further in section 2f. No partnerships of note have been identified.

Score: 4

2. Tokeneconomics

The Tokeneonomics section assesses the function of a protocol's token. This includes the token distribution, functionalities of the token, the ability of the token to incentivize positive behaviour in the protocol, and the ability of the token to capture a portion of the value created.

a) What is the extent of the token's capabilities? (10 points)

Is the token useful within the protocol? Does the token allow the holders to participate in governance or influence the protocol in any way? Does it serve any other purposes?

Answer: The token has utility within the protocol in two ways. Holders may participate in governance pertaining to big picture proposals. The day-to-day operational decisions are made by developers, and there are no indications of a planned change. Token holders can stake their FARM and accrue value from protocol fees.

Score: 4

b) Initial token allocation? (15 points)

The token distribution can be an indicator of a healthy protocol. When the protocol tokens are widely distributed among different stakeholder groups and contributors, this genuinely improves the coordinating capability of the token and strengthens the resiliency of the protocol. Was the initial distribution balanced between relevant stakeholders? Are the tokens distributed over sufficient participants (10, 25, 100 largest addresses)?

Answer: FARM was launched with a maximum supply of 5,000,000 tokens which would be minted over the course of 4 years. The supply started at 0 with no team allocations. There were also no investor allocations as no outside capital was raised to launch the project. During the initial period, it was noted that emissions were higher than needed for the growth of the project. As a result, a total of 14,850.108 FARM tokens were burned in order to decrease the total circulating supply. 5 weeks post launch, FARM governance voted to cap the supply at 690,420 tokens by reducing emissions over time. The current max total supply is just above 682k

The token currently has 13,698 holders and 97.92% is owned by the top 100. The largest wallet holds 18.45%, and this wallet is the FARM reward token. Full contract available here.

FARM Reward Token Top 100 Token Holders
Source: Etherscan.io
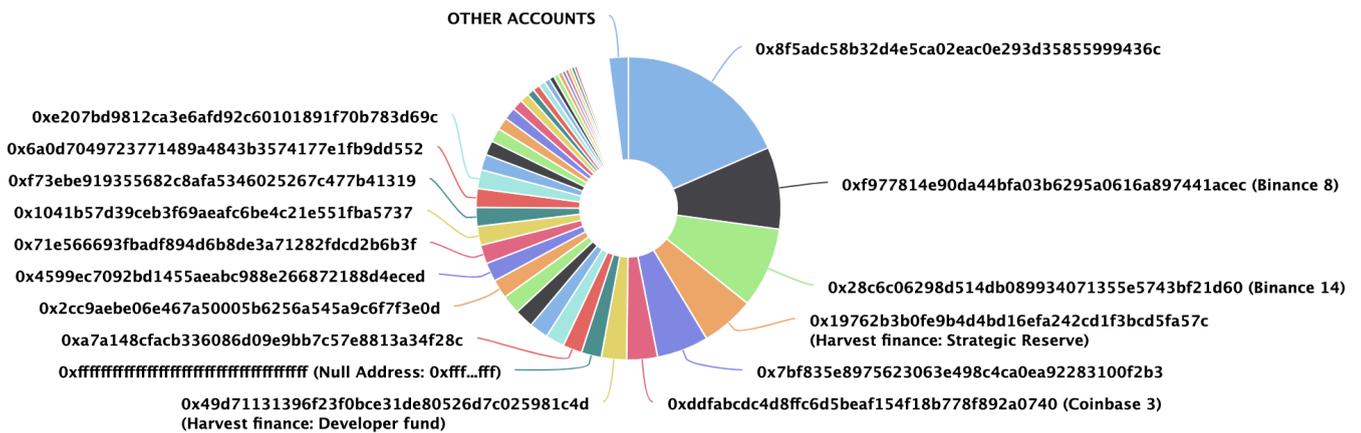
Source: Etherscan

The lack of team allocations bring long term incentives into question, and to which extent the founding team is motivated to keep improving the protocol. This also directly impacts the protocol's ability to attract and retain talent. Yearn Finance realized this and voted (YIP-57) to mint 6,666 YFI tokens to compensate key contributors. Ensuring appropriate alignment of interests are essential for successful projects, both on and off-chain.

Score: 5

# c) Continuous token issuance & tokenomics mechanisms (10 points)

Most token distribution schedules have built-in inflation. This section evaluates the purpose of that continuous token distribution. Is it justifiable? Does it help improve the coordination and alignment of incentives for the protocol? Does it incentivise positive-sum behaviour? Are the benefits flowing to all relevant stakeholders or just select groups?

Answer: As mentioned in section 2 a), governance voted to cap the total supply at 690,420. This is done by cutting

emissions by 4.45% every week until week 208, which ends on August 27, 2024. Reducing emissions to cap the supply directly affects the token value, which benefits all token holders. The plan is illustrated by the following chart:
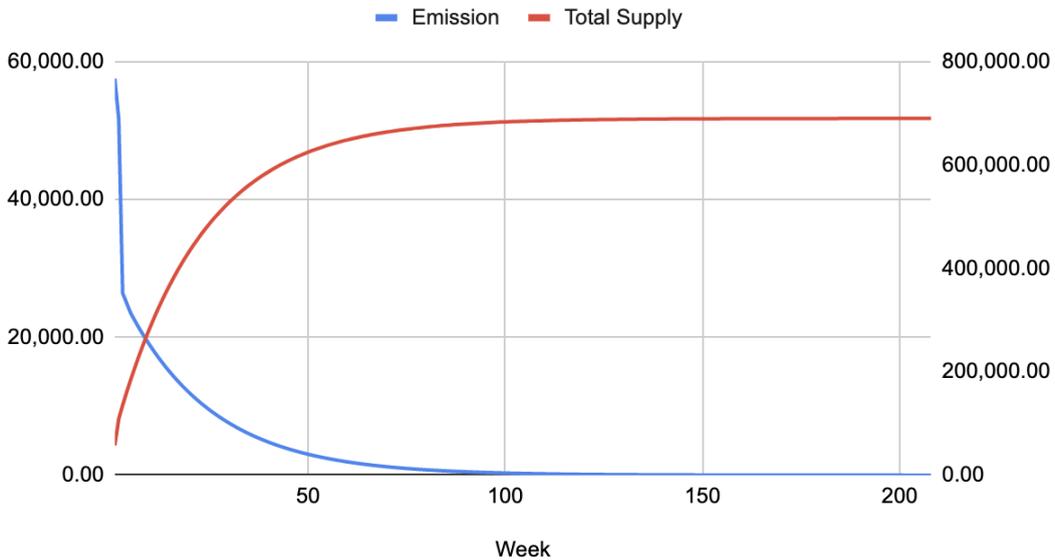
Source: [Harvest Finance](#)

[70%](#) of the weekly minted tokens are distributed to the depositors and LPs. This is continuously documented on Harvest's [Twitter](#) and [Medium](#).

20% of the weekly minted tokens are set aside for the development team. These are on a vesting schedule, and are [regularly sold](#) through TornadoCash in order to cover salaries for the developers.

10% of the weekly mint will vest to the treasury to cover costs related to additional development and promotion.

The issuance model generally incentivizes the right behavior across the board. However, since we don't know how many of the tokens minted for the dev team are sold through TornadoCash, it's hard to gauge their long term incentives.

Score: 5

d) Is the value capture model able to accrue and distribute value? (10 points)

A value accrual and distribution mechanism can help improve the utility of a token and its ability to be used as an effective coordination mechanism. Does the protocol have mechanisms to distribute some of the value created to the token holders?

Answer: There is a unidimensional value capture and distribution model for token holders. Token holders can stake their FARM tokens and participate in the [profit sharing](#) pools. The protocol fees are used to buy FARM in the open market, and deposit to stakers through the profit sharing pools. This also ensures a steady buy pressure on the token, which benefits the token in the short and long term. If liquidity dries up, the buyback mechanism may drive up the token price. Trading volumes over the past 180 days mostly show $1-25M+ in trading volumes. On the other hand, the buyback model results in pools gradually increasing their exposure to FARM. This comes with its own set of risks. FARM has no other direct value accrual models.

Score: 6

e) Is the token sufficiently liquid to enable active use and trade? (5 points)

Is the token widely available and is there sufficient liquidity available to facilitate all protocol functionalities?

Answer: FARM is widely available through centralized and decentralized exchanges, and daily volumes are sufficient to facilitate all protocol functionalities. Here are the top exchanges by 24h volume:

	Exchange	Pair	Price	Spread	+2% Depth	-2% Depth	24h Volume
1	ZB	FARM/USDC	$41.35	0.02%	$1,092,941	$1,186,767	$21,211,802
2	Binance	FARM/USDT	$41.62	0.24%	$27,119	$40,477	$13,855,420
3	Coinbase Exchange	FARM/USD	$41.40	0.27%	$20,479	$69,267	$5,092,646
4	Binance	FARM/BUSD	$41.10	0.24%	$14,644	$17,095	$7,557,432
5	MEXC Global	FARM/USDT	$41.39	0.19%	$13,561	$38,282	$914,983

Source: [CoinGecko](#)

Score: 4

f) Are there any extrinsic productivity use cases for the token? (10 points)

Besides the protocol's value distribution model as described in 2. d), can the token be used productively on other protocols (e.g. as collateral, for lending, LPing, yield farming, etc.)?

Answer: By staking FARM in the auto-compounding profit-sharing pool, users get iFarm tokens. These are non-fungible and transferable, and can be used for liquidity providing. They can also be transferred between wallets without having to unstake FARM. The tokens can also be [used](#) in the following ways:

- Earn trading fees by providing FARM Bancor's BNT-FARM pools
- On Quickswap, iFARM holders can pair the token with QUICK, and stake IFARM-QUICK for extra APY
- LP FARM on Ruler to earn Ruler rewards
- Use iFARM as collateral to borrow stablecoins on Fuse

In conclusion, the token may be used for DEX liquidity, LPing, lending, yield farming, and as collateral. However, it only supports a limited amount of protocols.

Score: 5

3. Team

The Team section describes the quality of the team behind the protocol. The current version of Prime Rating favours teams that are publicly identifiable. In the case of an anon team, the track record of the specific anons involved can be taken into account

a) Is the team credible and public? (15 points)

Are the identities of the core contributors and team publicly identified? In the case of anon team members, is there any way to track their background/record?

Answer: The team is anonymous. However, a [tweet](#) by Binance mentions two co-leads, @smokatokey and @JB87crypto, but there is no way to know their actual involvement on the development side.

Red: He has been referred to as a moderator in this [Medium](#) post. A [Twitter](#) post by Harvest Finance themselves referred to him as "Harvest's Foreman", which is also one of his roles on Discord. Social links: [Twitter](#)

JB87crypto: Limited information available. He has done a few AMAs back in 2021, but his actual role within Harvest Finance is not known. Social links: [Twitter](#)

In short, the core team is anonymous and we don't know the actual role of the few known individuals said to have an affiliation with Harvest.

Score: 0

b) Does the team have relevant experience? (10 points)

Are there any documents or trails available to showcase the track record of the team? Do the team members have relevant backgrounds and skill sets?

Answer: Yield aggregation requires resources with deep understanding of financial infrastructure, risk management, and security in order to succeed long term.

Red: He was [featured](#) on Bloomberg in January 2022. Red is also involved in Compli.FI (derivatives protocol) and APWine (yield derivatives marketplace).

JB87Crypto: According to his [Twitter](#) bio, he has involvement in a few protocols outside of Harvest, namely DeSci, adecentralized scientific community, and SpoolFi, a DeFi middleware.

Given the lack of available information about the core team and their backgrounds, there is good reason to give 0 points. However, the protocol's success warrants +2 points.

Score: 2

c) Does the team participate and help shape the public debate? (5 points)

To what extent do the protocol contributors participate in the public debate around open finance? Are the team members giving presentations, sharing their thoughts and opinions, and do they help raise the collective intelligence of the industry?

Answer: Aside from a minor appearance on Bloomberg where Red spoke about DeFi, banks, and APYs.The anonymous team values privacy and does not engage in meaningful public debate. Normally this would warrant a 0 score, but the Bloomberg appearance warrants an extra point.

Score: 1

d) Is the team able to effectively attract and coordinate resources? (10 points)

How effective is the team at attracting and coordinating resources for the benefit of the protocol? Has the team raised sufficient funding or are there mechanisms in place to attract resources when needed?

Answer: The protocol has not raised VC funding. Their "Council of 69" makes small seed investments in startup protocols. The last proposal was made in December 2021. There are no signs of investment activities so far in 2022. The process is transparent. Community members can nominate deals, and token holders can vote on proposed investments on Snapshot. However, startup investing is an artform that requires direct experience. Token holders may not have the skill set required to appropriately evaluate startup deals, and it remains to be seen if these investments benefit the treasury in any way.

Harvest Finance has a strategic reserve wallet with 39,602 tokens which equals approximately $1.67M. The strategic reserve has remained untouched since early 2021. Their developer fund wallet has a balance of 18,631 tokens, which is roughly $786k. The balance has been somewhat cyclical, but has seen steady growth since January 2022.

Their operations fund has 9,295 tokens, equaling a dollar value of approximately $392k, and has been steadily growing since mid-2021. This should be sufficient to sustain and grow their position going forward. The lack of transparency around coordination is a major drawback, as we don't really know how it's spent beyond the "development" and "operations" categories.

The anonymous team makes it impossible to gauge their ability to attract talented people. The protocol has been among the top contenders within yield aggregation since shortly after launch. In comparison, Yearn Finance excels not only in terms of TVL, but also their ability to attract top-tier talent and thought leaders in the space. The lack of transparency around coordination and HR brings the score down to 5.

Score: 5

4. Governance

The Governance section evaluates how the protocol is governed and who the governors are. The different governance functionalities and processes are evaluated to determine to what extent the Protocol will be able to self-govern in a way that ensures the development of the protocols while respecting the needs of all current and future stakeholders.

a) Admin Keys (20 points)

Admin Keys allow some critical functionalities of a protocol to be controlled by an admin. This allows the developers to react to potential bugs, but also creates a risk as the developers could potentially misuse the admin keys to exploit the protocol. Does the protocol have admin keys and how are they managed?

Answer: According to Peckshield's audit, there is an "overly-privileged governance-controlling EOA" (externally owned account), which is an admin key. The previous report mentioned that this admin key had been under scrutiny by Chris Blec for having the power to perform a rug pull. The admin key has been confirmed by Harvest Finance, and they have imposed a 12-hour time lock as a security measure.

A time lock has pros and cons. On a positive note, it gives users 12 hours to withdraw funds should the admin key be used for malicious purposes. The downside is that the time lock also applies to fixing vulnerabilities. Token holders

should be weary of admin keys, and dismantling the admin key would generate a higher level of trust than the time lock.

Score: 3

b) Extent of Governance capabilities (15 points)

Distributed governance allows the token holders to participate in the governance of open finance protocols. How much influence does the governance mechanism have? Are the votes affecting on-chain changes or do they function solely as signals to the team?

Answer: As stated by the developers, token holders are able to vote on "higher order" proposals. Exactly what this entails remains unknown. Examples include the proposal to restructure the emissions schedule, and the decision to issue GRAIN as reparations after the exploit in October 2020. Proposal submission requires 1 FARM, approximately $42.50 worth of tokens. Strategies, treasury management, and day-to-day operations are handled exclusively by the developers. The lack of clarity around the scope of community governance makes it hard to give a high score.

Score: 4

c) Active Governance contributors (5 points)

Governance is a process that can be rather resource-intensive if executed well. To ensure good governance is practiced by the protocol, it's important to have a sufficient number of governors allocate resources to the governance process of the protocol. How many individuals participate in the debate around the protocol? How active are voters?

Answer: Over the past year, proposals have received between 1 and 169 votes. This is noticeably less than Yearn's community engagement, where some proposals get more than 1,000 votes.. Their Discord is their sole place of discussion, and it has a decent level of activity. They have a strong following on social media:

Twitter: 62,400

Discord: 16,650

It's worth mentioning that their Snapshot page has 173 members. Yearn Finance has 3,500 and Beefy Finance has 3,700 members. Implementation of dedicated forums for governance discussions would facilitate more orderly governance, and would also make it easier to judge the engagement level.

Score: 2

d) Governance technology/infrastructure (10 points)

The Governance infrastructure relates to the technology, software, and models used by the protocol's governance. Does the protocol have a reliable and usable voting mechanism? Are there channels for governance debate? Is there sufficient documentation available?

Answer: Snapshot is used for proposal submissions and voting. There is no forum for discussion outside of Discord, which might make discussions hard to follow. Snapshot is a limiting factor since it's off-chain and adds an extra step to the governance process. The overall documentation is minimal.

Score: 4

e) Robustness of Governance process (10 points)

This score requires documentation specifically on the governance process that sets the basic framework in terms of agreements, norms, and language for governing the protocol and to create social consensus. Does the protocol have a formal governance process? How robust is the governance process and does it promote good governance?

Answer: Their [documentation](#) states that voting takes place on [Snapshot](#), and informal discussions and polls happen on Discord. There is no additional information regarding a concrete governance process. As mentioned in section 2 d), not having a forum for discussion outside of Discord might spark confusion among token holders, and prevent constructive dialogue from taking place in an orderly manner. In conclusion, Harvest Finance does not make an adequate effort to promote good governance.

Score: 2

5. Regulatory

The Regulatory section describes the extent and quality of the regulatory environment that affects the Protocol. To be able to guarantee functionality, security, and legality the protocol should comply with regulatory requirements, or limit itself to facilitating services to users who are willing to operate outside of the traditional regulatory environment.

a) Does the protocol have any legal accountability? (15 points)

Does the protocol have any form of legal accountability? Can users and partners hold the protocol accountable in case of a breach of the agreement?

Answer: Despite operating in a semi-centralized fashion, they are a decentralized organization with no legal accountability. No legal entities have been identified.

Score: N/A

b) What is the quality of the legal jurisdiction? (10 points)

If the protocol has a legal entity, what is the quality of the jurisdiction the entity is established in? Will the jurisdiction be able to facilitate the legal framework for the protocol to expand while remaining accountable.

Answer: There is no applicable legal jurisdiction.

Score: N/A

About the Author: DeFi researcher with tradfi background.