PrimeRating

Fundamental Report

Prime Rating Report V2.1

Protocol: ParaSwap
Version: v5
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Previous Report: Link

Author: OriginalSK
Reviewed by: xm3van
Season/competition: Season 2

Scorecard

1. Value Proposition	Points
a) Novelty of the solution	5 / 15
b) Market fit/demand	8 / 15
c) Target Market Size	9 / 10
d) Competitiveness within market sector(s)	3 / 10
e) Integrations & Partnerships	12 / 15
Total Points - Value Proposition	**37 / 65**
2. Tokeneconomics	**Points**
a) Is the token sufficiently distributed?	3 / 15
b) What is the extent of the token's capabilities?	7 / 10
c) Is the issuance model able to improve the coordination of the protocol?	6 / 10
d) Is the value capture model able to accrue and distribute value?	1 / 10
e) Is the token sufficiently liquid to enable active use and trade?	2 / 5
f) Are there any extrinsic productivity use cases?	2 / 10
Total Points - Tokenomics	**21 / 60**
3. Team	**Points**
a) Is the team credible and public? (No, Partly, Yes & Anon , Yes & Public)	12 / 15
b) Does the team have relevant experience?	7 / 10
c) Does the team participate and help shape the public debate?	5 / 5
d) Is the team able to effectively attract and coordinate resources?	7 / 10
Total Points - Team	**31 / 40**
4. Governance	**Points**

a) Admin Keys	**5 / 20**
b) Extent of Governance capabilities	**13 / 15**
c) Active Governance contributors	**5 / 5**
d) Governance infrastructure	**8 /10**
e) Robustness of Governance process	**10 / 10**
Total Points - Governance	**41 / 60**
5. Regulatory	**Points**
a) Does the protocol have any legal accountability?	**15 / 15**
b) What is the quality of the legal jurisdiction?	**9 / 10**
Total Points - Regulatory	**24 / 25**
Total	**154 / 250**

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:
Paraswap is a decentralised exchange aggregator, it acts as the middleware between users and other dApps like exchanges/DeFi services. The protocol pools liquidity from DEXes like Uniswap and Balancer into their interface removing the need for users to manually source the best exchange rates. Multipath is Paraswap's routing algorithm that enables trade orders to consider direct trades through DEXes or indirect routes through other DeFi protocols like Aave.

On a technical level Paraswap seems pretty similar to other aggregators like 1inch and 0x, Paraswap's Multipath 'special sauce' isn't too dissimilar to 1inch's Pathfinder. Multipath's use of indirect routes appears to be a minor differentiator. Paraswap recently introduced DAO governance, the governance process utilised follows what is commonly used by other DAO's i.e. Discord > Forum > Snapshot. This section is scored 5 for their minor technical innovation.

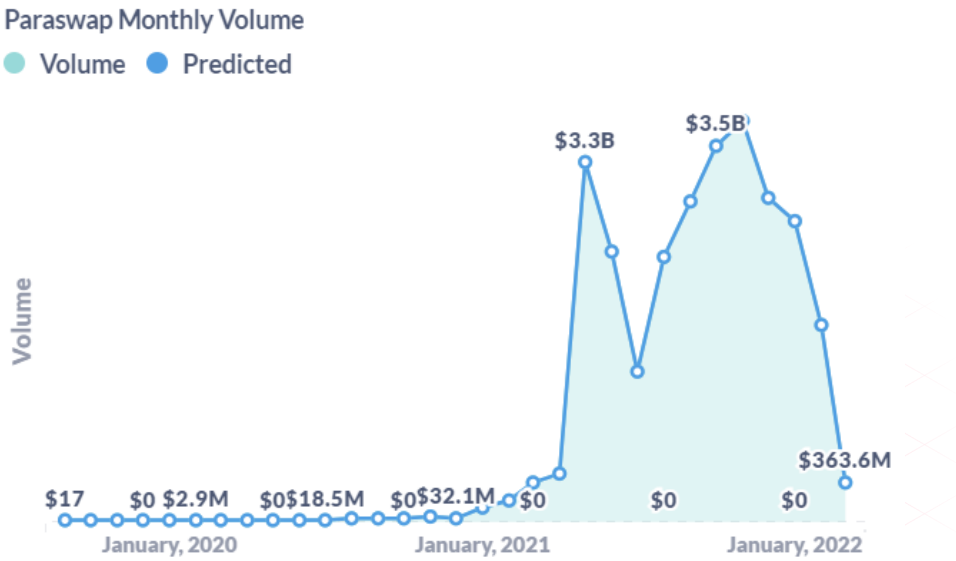
Score: 5

b) Market fit/demand (15 points)

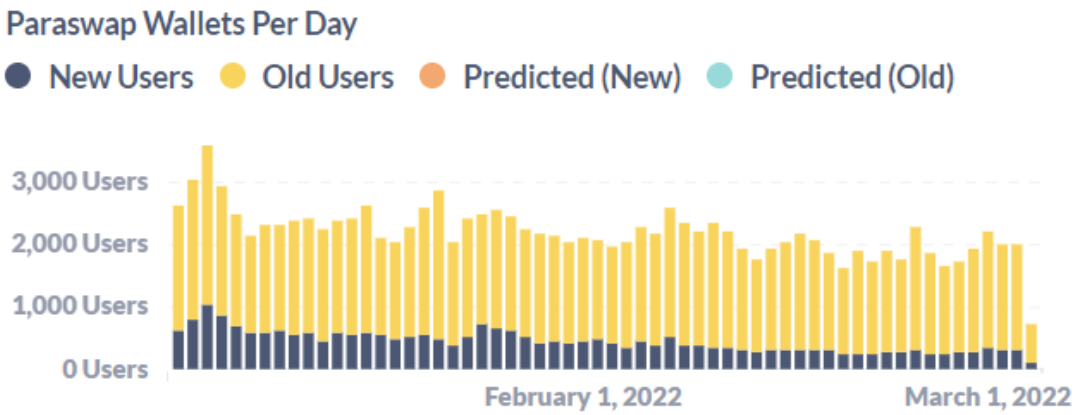
This score evaluates the degree to which the protocol satisfies a strong market demand. The market fit evaluates if

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?

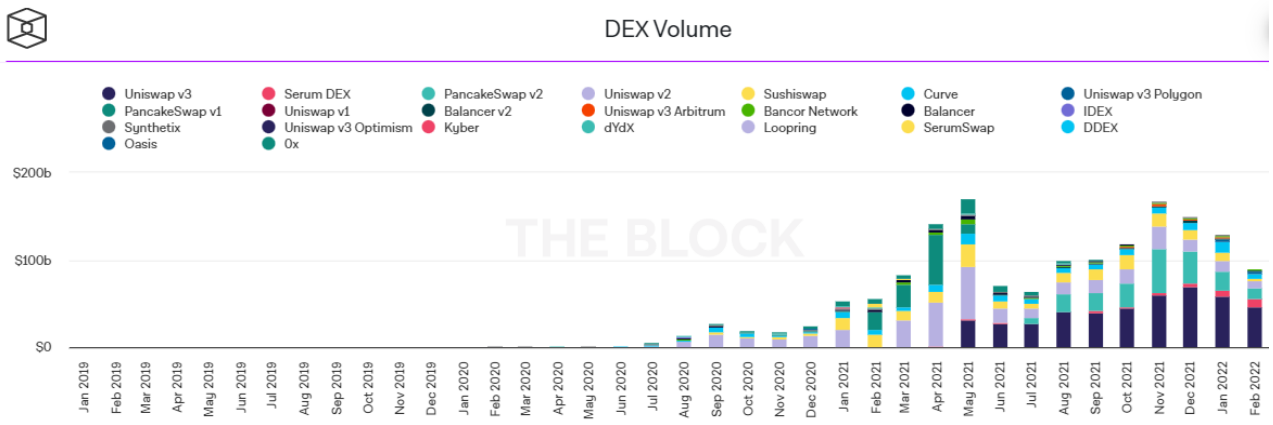
Answer:
User adoption until Nov 2021 had been positive, seeing monthly trade volume growth between January 2021 - May 2021 and July 2021 - Nov 2021 (graph below). Since the November 2021 peak of ~$3.5B trade volume has declined with less usage occurring on the protocol. The post November 2021 user drop off could be explained by the negative airdrop launch (15 Nov 2021), users of the protocol were hoping to receive the native PSP token but were disappointed at the narrow distribution due to strict eligibility requirements (see section 2a).



Wallets/Users per day (graph below) on Paraswap also appears stagnant with new wallets entering the platform declining (for periods between 4 Jan 2022 - 4March 2022).



DEX trading volume overall has grown, recent collective DEX monthly volume traded was over $100B from September 2021 until January 2022. High trade volumes indicate that demand for DEX has increased with over 100 DEXes tracked on Coingecko. Long term it makes sense for aggregators to grow in usage given the number of DEXes available and growing trading pairs.



DEX trading volume: theblockcrytpo

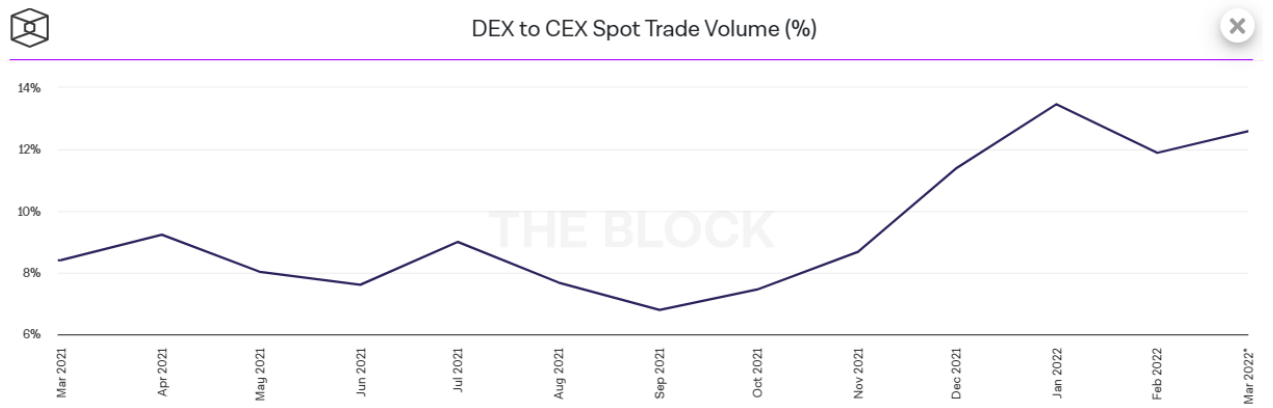
Signs of market fit are visible but Paraswaps stagnant user numbers and declining volume usage indicate they haven't achieved it. Therefore for this section a 8 is given.

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:
Aggregator market size is coupled with DEX market size, DEX TVL represents ~33% of total DeFi TVL (~$67B/$203B). Overall DeFi TVL as tracked by DeFi Llama has seen overall growth. DEX TVL tracked by DeFiPulse has also seen growth between 4 March 2021 and 4 March 2022. The DEX market is becoming more significant as shown by DEX to CEX trade volume - Monthly decentralised exchange volume divided by centralised exchange volume (as a percentage). DEX volume for Feb 2022 amounted to ~$90B.



DEX to CEX trade volume: theblockcrypto

The target market size is large and has the potential to grow to compete with CEXes. Aggregators are dependent on DEXes for their functionality, therefore for this section an 9 is given.

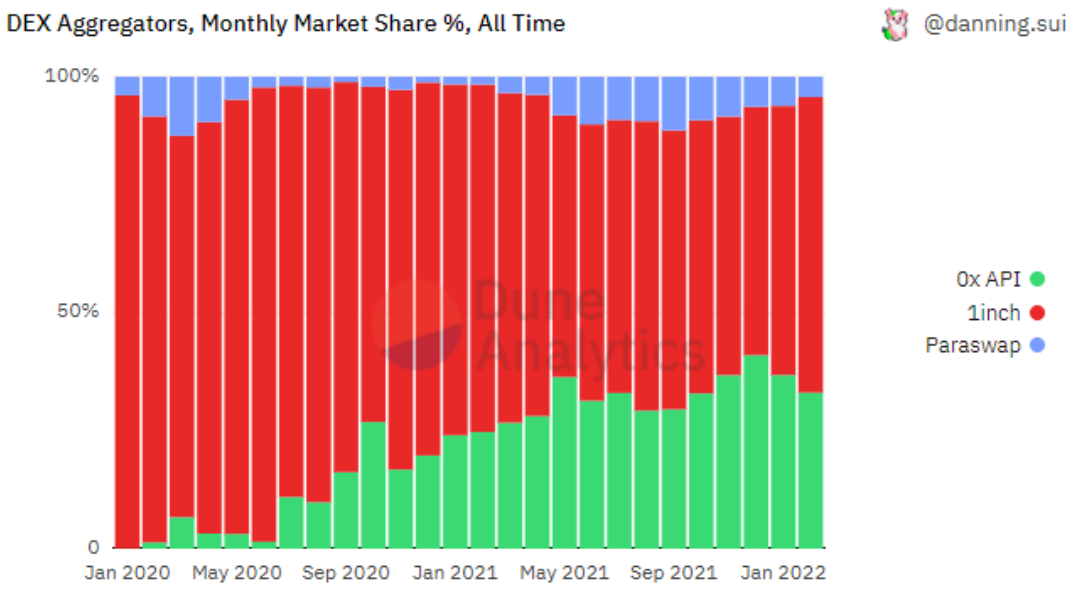
Score: 9

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:
The aggregator market is occupied by a few protocols namely Matcha, 1inch and 0x. The clear market leader in the space is 1inch, in terms of trade volume for liquidity aggregators (excluding MetaAggregators and Wallets) 1 inch makes up more than 50% of volume as tracked by theblockcrypto. Competitors Matcha, 0x and Tokenlon follow in trading volume.

Market share also indicates that 1inch and 0x are more established than Paraswap, over time it appears that Paraswap has lost some of its share to its competitors.



DEXAggregator Monthly Market Share: Dune Analytics

Paraswap currently struggles to compete against market leaders 1inch and 0x, it's also hard to say that the protocol is an alternative given the lack of market share and stagnant users (see section 1b). Therefore for this section a score of 3 is given

Score: 3

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:
Paraswap has been integrated in a number of protocols and services. Wallet services; Argent, Monolith, Metamask and Ledger Live have integrated Paraswap to enable users to exchange tokens across multiple exchanges. Other types of aggregators have integrated Paraswaps services - source:

- Quadency: trading terminal that uses Paraswap to pool liquidity sources

- DeBank: provides metrics e.g. TVL and project rankings using ParaSwap rates
- Frontier: a chain-agnostic DeFi aggregator uses ParaSwap's API to enable their user swaps on BSC and Ethereum
- deBridge: a cross-chain interoperability and liquidity transfer protocol, partnership enables cross-chain swaps.

Other protocols that use Paraswap to enable aggregated swaps - source:

- Enzyme Finance: Asset management
- Stake DAO: DeFi interface providing strategies and portfolio tracking features
- Savitar: Custodian exchange based in France providing access to DEX

Partnerships:
Reef: a 'cross-chain DeFi operating system' partnered with Paraswap to build out its platform
Celer cBridge: a cross-layer asset bridge, partnership to combat vendor lock-in and adoption of the Open Canonical Token Standard.

Integrations out weigh partnerships which seem to provide an important service for other protocols. Partnerships aren't with well known entities therefore this section is scored 12.

Score: 12

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) Is the token sufficiently distributed? (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:
On November 15th 2021, the ParaSwap Foundation launched its PSP token issuing 150M tokens of its 2B total supply via airdrop to eligible active users. This distribution method was intended to bootstrap the DAO community but was met with criticism for only distributing 7.5% of PSP's total supply to 20 000 users from 1.3M addresses that have used ParaSwap, 13762 addresses have claimed so far. The top 100 addresses own ~99% of circulating supply according to Etherscan, as PSP was distributed across multiple chains this seems to be a narrow measure.

Data on supply distribution over time or distribution measures against competitors are currently unavailable (*see app.santiment.net*), this may be due to the token's recent launch. Given the available data it's hard not to conclude that distribution is narrowly distributed. Therefore this section is scored 3.

Score: 3

b) 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:
$PSP acts as the protocol's governance token. Any PSP holder can vote on proposals but submitting a proposal requires PSP holders to own at least 5400 PSP. Holders can also stake PSP in ParaSwaPools - aggregated liquidity provided by various private market makers. Liquidity providers are incentivised to create pools through PSP rewards, staking acts as a mechanism to allocate PSP to market makers (PSP rewards budget). The best performing pools based on numerical data and qualitative data in the form of stakers to pools receive more PSP after every epoch (14 days).

Basically: “The more users stake on a given ParaSwapPool, the more the PSP earnings of the associated market maker increase.” & “The more competitive the liquidity provided by the MM is, the more PSP rewards the staker will get.” - source.
This section is scored a 7 given the tokens governance and revenue utility that function to improve the protocol’s efficiency.

Score: 7

c) Is the issuance/distribution model able to improve the coordination of the protocol? (10 points)

To what extent does the issuance of the token support the advancement and function of the protocol? Are the tokens justifiably being issued? Does the issuance model incentivize the right behaviour? Are all relevant stakeholders benefiting from the issuance model?

Answer:
As mentioned in 2a 7.5% (150M PSP) was airdropped to existing active users based on “..time the user first interacted with ParaSwap, if and how frequently he came back and how savvy the swaps were.” Total supply of PSP is 2 billion, current circulating supply sits at ~243M.

PSP supply allocation: 51% community, 14% investors, 17.6% core team, 10% reserves, 5% future team and 2.4% pre-seed investors & advisors. Investors’ tokens are subject to a minimum vesting period of two years (with 4 months lockup) and up to three and a half years for team members (+6 months cliff).

ParaSwaps initial issuance was criticised for excluding a large portion of its active users but their issuance model over time allocates more to the community (incentives and rewards). The team and investors also have to vest their tokens over 2-3 years, given these factors a score of 6 is given.

Score: 6

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 are two main sources of revenue for the protocol, 50% of positive slippage on transactions and 3rd party services. Positive slippage occurs when competing transactions push the price of a swap lower than expected, Paraswap takes 50% of this the rest to the swap user. Services that integrate Paraswap into their platform pay an automated 15% of their trading fees - source.

Revenue collected is currently exclusively used to fund the development of the protocol, fees collected go towards securing Paraswap through a Safety Module. The recent launch of PSP could explain the lack of distributed revenue to token holders. This section is scored 1.

Score: 1

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:
$PSP is available on 3 centralised exchanges and 2 decentralised exchanges - Coingecko. Based on Coinmarketcap data liquidity seems to be quite low with scores between 7 - 200 (scored 0 - 1000, close to 1000 representing high liquidity)

Score: 2

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:
Token holders can LP however only 2 markets seem to exist (Sushiswap and Bancor).

Score: 2

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:
From LinkedIn; Mounir Benchemled: founder and CEO, LinkedIn, Crunchbase - Cristina Manea: Branding & Growth, LinkedIn - Brice Berdah: Governance Ambassador, LinkedIn, Twitter.

From Github; Shresth Agrawal: Algorithm Developer, LinkedIn, Personal Site - Sameep Singhania: Lead Developer, LinkedIn

Team is credible and public, this section is scored 12 as more could be done to consolidate team information.

Score: 12

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:
Founder Mounir has a background in computer science, prior to founding Paraswap he worked as a developer for over 10 years. DeFi related experience is limited to being an organiser for DeFi meetup DeFi France. Brice has a background in marketing and has previously had roles in Web3 at wallet service Monolith and organiser of DeFi France. Cristina has a background in marketing and design, prior to Paraswap Crisitna worked as consultant and product manager - unrelated to DeFi. Shresth has a background in computer science and worked as a blockchain developer prior to his role at Paraswap. Sameep has a background in computer science and was previously a lead/freelance blockchain developer for a number of companies.

DEX related experience couldn't be found for any of the team members, the development team are however skilled and have relevant experience e.g. developing ERC20 tokens and decentralised marketplaces. Based on positive governance engagement the non-technical team have also developed relevant experience in community management. This section is scored 7 for the skilled team with some relevant experience.

Score: 7

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:

Brice is the most active of the identified members, with over 19 000 Twitter followers he regularly discusses the merits of DeFi and the state of open finance. Articles and learning material can also be found on his personal website here, Brice has written and curated numerous pieces on DeFi that show his commitment to advancing open finance. Mounir is more visible publicly having given interviews on DeFi e.g. ETHDenver and being an organiser of monthly meetup DeFi France.

Producing educational material, independent articles and a meetup promoting DeFi merit a full score for this section.

Score: 5

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:
Paraswap raised an initial seed round of $2.7M from 32 investors including Blockchain Capital, Alameda Research, CoinGecko. Access to Aave founder Stani Kulechov and Coingecko could be beneficial to the protocol. Funds raised had been allocated to grow the team and scale infrastructure, coordination beyond this hasn't been disclosed. In 2020, Paraswap was a part of DeFi alliance, a Web3 startup accelerator, the networks and non-financial resources gained (e.g. advisors) would be hard to quantify.

Score: 7

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 DeFi Safety; "No admin access control information was found in the ParaSwap documentation. No evidence of a Pause Control or similar function in ParaSwap's documentation and GitHub repository".

A Certiks audit of Paraswap found that 'Augustus Swapper' - the exchange proxy that enables swaps on ParaSwap - had potential access security risks:

"We have found many usages of onlyOwner modifier usage in the AugustusSwapper. Many contract parameters can be changed by the owner at will"

"In case of lost access to an account's private key or mishandling security of private keys, an attacker could benefit from that and replace key parameters. We advise that a governance system or multi-signature wallet is utilised instead of a single account in this case."

The risk to users is clearly stated in 'ASR-03: Centralization concern' of the audit indicating that "*...an attacker could benefit from that and exploit ParaSwap users*."

These direct quotes shouldn't be taken to definitively prove that admin keys exist but they do indicate that access controls exist (to the best of my reading of the above). Therefore this section is scored a 5 for the single account held by the team.

Score: 5

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:
Governance ability - source:

- Allocate and adjust PSP budgets
- Change protocol parameters related to PSP (token or staking) e.g. lock-up period
- Create, fund, and revoke budgets on executive committees

Examples of past proposals: 'Launch ParaSwap on Fantom', 'Adding Bancor liquidity pool'. Implementation date votes are also held to determine the timeline of approved proposals.

This section is scored 13 given the on-chain, budget and strategic decisions that governance influences. 2 points are deducted for the multi-sig recommendation made in section 4a.

Score: 13

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:
Frequent governance discussions are held on Discord and on Forum, voter participation is also strong with multiple voters e.g. here.
Score: 5

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:
Discord is used to gauge enthusiasm and potential support around a proposal, all community member can participate in #general-gov! channel. The gov.paraswap forum formalises discussions in PSP-IP proposals; members who satisfy the PSP threshold can submit proposals. Votes are conducted on Snapshot.

Infrastructure used here is inline with what other DeFi protocols currently use. Active user engagement indicates that this infrastructure is reliable and useful for governance. This section is scored 8 as a single discord channel for all governance discussions isn't ideal.

Score: 8

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:
Full documentation can be found here, see section 4d for an explanation of the governance process. Paraswaps governance process is well documented and seems robust from their forum and snapshot history (see section 4c sources). Additionally DAO governance roles like 'Governance Scribes' help community members navigate governance processes and add to robustness.
Score: 10

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:
ParaSwap is an online service made by ParaSwap NETWORK, a French company (société par actions simplifiée) - source.

Score: 15

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:
Legally registered with the Nanterre Trade and Companies Register under number 882 344 039, located at 128, rue La Boétie, 75008, PARIS (FR) - source.

Score: 9

About the Author: OriginalSK