

Fundamental

Prime Rating Report V2.0

Protocol: [Impermax](#)

Version:

Previous Report: N/A

Date: 25/10/2021

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Reviewed by: Lavi

Season 1

Instructions

Please go to files and make a copy of this template.

Fill in all questions with a written explainer, any relevant links, and score per variable. Insert the scores in the scorecard at the end of the report.

Please include your sources into the text (as a link), so others can follow your trail of thought.

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:

Impermax is a DeFi lending platform that lets liquidity providers use their LP tokens as collateral for permissionless loans. This has the potential to solve a key issue for tokens locked in LP contracts (for instance see [HydraDX Omnipool](#) experimentation with the goal to increase capital efficiency). The LP backed loans can be used for trading, staking, or to increase one's liquidity providing position. The latter use case enables yield farmers to take leverage liquidity provider positions. [1]

This is made possible through two novel solutions as presented in the [whitepaper](#) [2];

1. The unique economic architecture of the Impermax protocol keeps all lending pair pools separate, allowing a borrower's position to be liquidated in one pair, while other pairs in the pool will not be affected.

- Impermax uses a parameter called “safety margin” to reduce the required over-collateralization and provide much higher leverage than similar current designs.

This can be considered a technical innovation, as it substantially differs in structural design from its only competitor Alpha Harmona (according to this raters research and Impermax protocol) [5]. Overall, Impermax introduces technical innovation and addresses a clear market infrastructure problem, which justifies a score of 12 points.

Score: 12

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?

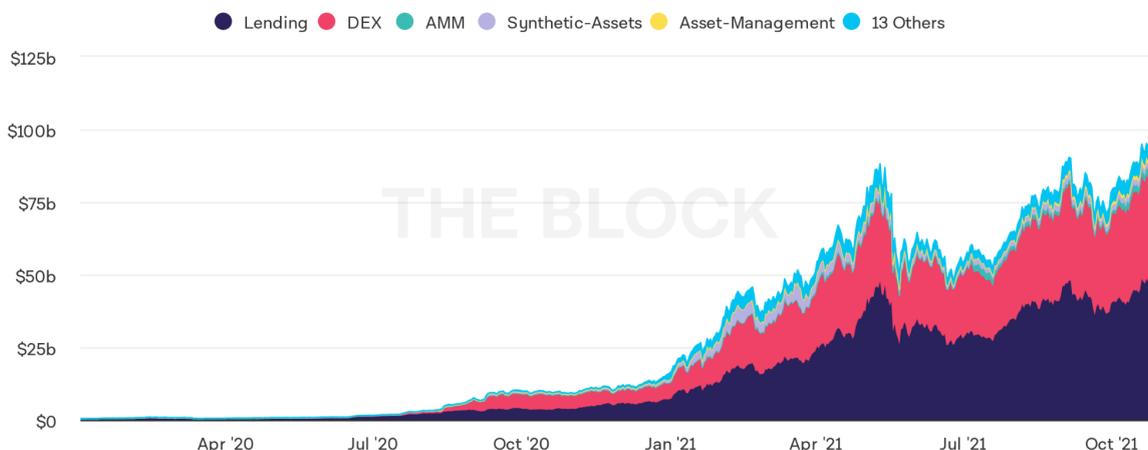
Answer: The protocol is in a promising market for two reasons: 1) it is likely to play a key role in bear markets for the average yield farmer 2) it solves a key issue in the efficient use of capital.

Reason 1- and to some extent speculative - is the role of leverage yield farming in a bear market. The cryptocurrency markets have behaved cyclical in the past. In a market downturn, yields are likely to decrease with an overall reduction in market activity and reduction of abundant capital. Leverage can allow yield farming with high APY during down cycles and thus Impermax is well-positioned as tooling for a bear market [3]. This makes it a potentially interesting investment for the bear market relative to other DeFi primitives like DEXes, Aggregator or common lending protocols.

Capital locked in LP traditionally cannot be utilised to a large extent at present. This represents an inefficient use of capital. Given that the total value locked in AMM alone (one of the primary sources of LP Tokens) is around 4 Billion of the 100 Billion Total Value Locked in DeFi (see below) freeing some of the value to seem like an attractive use case.



Value Locked by Category (Net)



SOURCE: DEBANK
UPDATED: OCT 27, 2021

Figure 1: Value Locked by Category (Net), TheBlockCrypto. Note: Not that the chart below only refers to the Ethereum Ecosystem.

Onchain metrics of Impermax were unfortunately not accessible to this rater over the longer time horizon, but investigation of Alpha Harmona user base (the main competitor of Impermax [4]) shows a sustain yet small user base with on average 100 - 200 users interacting with the protocol on a daily basis. This is a sign to be cautious and the development should be monitored in the future.

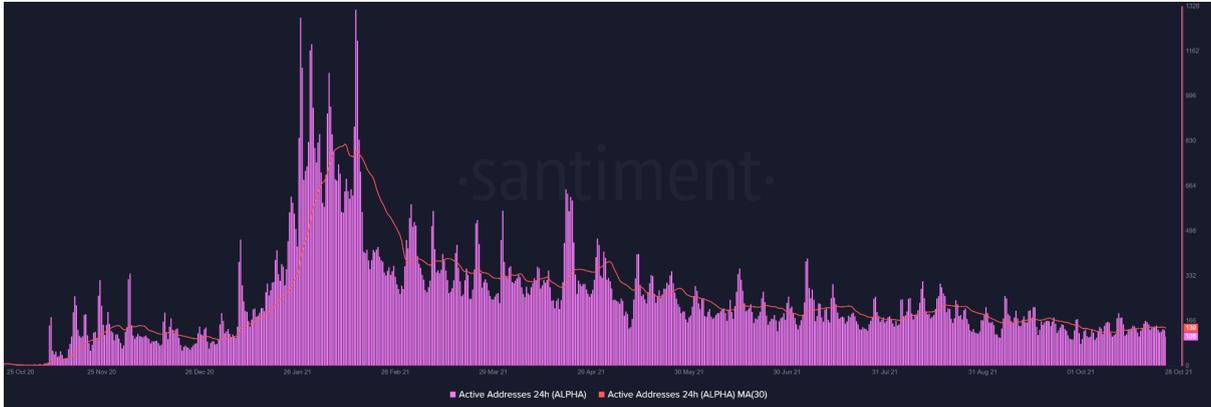


Figure 2: Daily Active Addresses (24h) with 30-day EMA from October 2020 to October 2021, Santiment.net.

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: A fair estimate of the target market size is by focusing on the primary source of LP tokens which originates from Automated Market Maker protocols (such as Uniswap/ Sushiswap). Again referring to Figure 2 presented in previous subsection b) of the Value Proposition, AMM represents at present 4 Billion and is steadily growing. In addition, the most successful DEX mechanism at the time of writing is the AMM exchange mechanism (see Curve, Uniswap for example [competing in Market Cap with centralised equivalents](#) [6]). Assuming the continued growth of AMMs and deployment of AMM protocols across different protocols it is likely that the target market size is substantial. Nevertheless, LP tokens, while popular at present are one conception of an exchange mechanism which is novel and while already a DeFi primitive still has to stand the test of time of other innovations. It thus is at present limited to the DeFi ecosystem and to a specific mechanism, thus there is a risk of growth potential in the future.

Score: 7

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 only identifiable competitor was Alpha Harmona from Alpha Finance Labs [4]. When comparing TVL (ALPHA:\$1,011,983,144 [7] > IMX: \$33,682,925 [1]) Alpha Harmona is the clear market leader. Similar observations can be made for the trading volume, which for the month of October 2021 range from \$40,000,000 to \$6,000,000 for Alpha Finance [7] and from \$2,000,000 to \$10,000 for Impermax. One must note that direct comparison may not be fair as Alpha Finance offers a range of products beyond Alpha Harmona (e.g. Alpha Launchpad) [8], nevertheless, the multiples of magnitude in TVL and volume suggest lesser utilisation of Impermax at this stage.

Impermax provides tangible benefits over Alpha Harmona, thus giving it a viable chance of competing long term.

	 ALPHA HOMORA	 IMPERMAX
Fully Diluted Market Cap	\$1.7B	\$5M
Allows to Use LP Tokens as Collateral?	Yes	Yes
Max Leverage Given Same Risk Exposure	2.5x	7x
Max Leverage on Stablecoins	9x	20x

Figure 3: Comparison of Alpha Harmona vs. Impermax, Impermax.finance¹

Overall, Impermax seems to currently represent the only alternative to Alpha Harmona and in addition presents itself competitive to the market leader, hence a score of 7 is justified.

Score: 7

e) Integrations & Partnerships (15 points)

¹ Note: While this is published by Impermax themselves it portrays objectively verifiable benefit hence it was included in the research report.

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: The protocol has integrated their service on top of other protocols (Quickswap, Uniswap, Sushi, Pangolin, Swapr) but yet operates already on different chains (Ethereum, Polygon and Avalanche) and the Ethereum L2 Arbitrum [9].

Score: 7

2. Tokenomics

The Tokenomics 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 behavior 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: 97.8% of all tokens are held in the top 100 addresses from a total of 2827 unique token holders. This compared to other projects (e.g. CRV - 50,069 , PERP - 8,822) makes a rather

centralised impression [1].

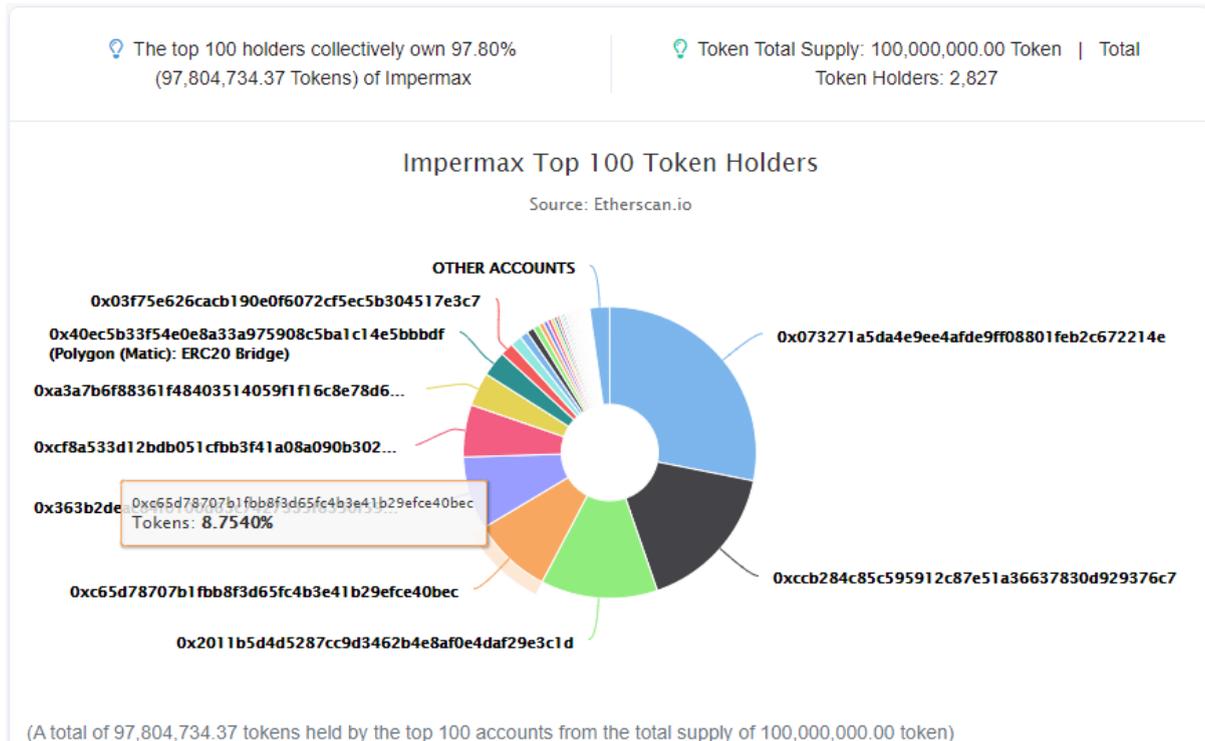


Figure 4: Impermax Top 100 Token Holders, Etherscan.

A closer investigation of top holders through the Nansen.ai platform reveals that many addresses belong to the protocol itself. Most notably a large share of vesting contracts presumably [controlling the slow release](#) over 4 years of Treasury Funds, Private Sale, Protocol Growth and Development Funds and Core Contributors [2].

Top Balances						8min ago
Name	Balance	% Ownership	Change 7D	Change 30D		
VesterStipped	28,121,568	28%	0	-1,592,427		
Vester	16,638,978	17%	0	0		
MerkleDistributor	12,983,218	13%	-8,888	-32,888		
Vester	8,754,828	8.75%	0	-498,872		
Impermax: Staking	8,237,884	8.24%	179,266	735,781		
VesterSale	5,786,492	5.79%	0	-358,234		
Arbitrum: L1 ERC28 Gateway	3,621,718	3.62%	-189,921	1,818,562		
Polygon: PoS ERC28 Bridge	2,499,383	2.5%	-351,178	-1,852,186		
Vester	1,462,128	1.46%	0	-76,252		
Uniswap v2 Pool: IMX-WETH	1,885,688	1.89%	83,665	-298,574		
0x434_7686c	899,562	0.9%	0	99,887		
Phoenix Finance: BSC and Manch...	799,547	0.8%	-953	799,547		
ReservesDistributor	669,948	0.67%	-54,372	-188,785		
Dex Trader	588,888	0.5%	0	0		
0x87d_2a845	424,646	0.42%	0	187,378		
Pool Creator	423,872	0.42%	-82,769	56,222		
OwnedDistributor	347,138	0.35%	0	66,721		
Medium Dex Trader	333,647	0.33%	0	199,143		
High Balance	323,115	0.32%	128,252	323,115		

Figure 5: Top Balances of Impermax Token, Nansen.ai

An accurate description of token holder distribution at this stage is more speculation rather than objective investigation, given the current data availability. Due to the low unique holder count, and the absence of sufficient data, a lower score is assigned bearing a prudence principle in mind.

Note: The initial token distribution would be deemed fair by this rater [2].

Score: 8

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: IMX token holders control governance, profits, and reserves generated by interest and fees on the Impermax lending platform [2]. The token, therefore, provides effective utility, revenue, and governance rights to the holder and thus justifies a high score.

Score: 8

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 behavior? Are all relevant stakeholders benefiting from the issuance model?

Answer: The IMX Token is a fixed-supply governance token of 100 000 000 IMX. The initial raise to private investors was only 500 K USD (or 10% of the Tokensupply) with advisors and partners only receiving 2%, each vested over 4 years. While the community only received 1% of the initial token distribution, a large airdrop to top liquidity provider was conducted [2].

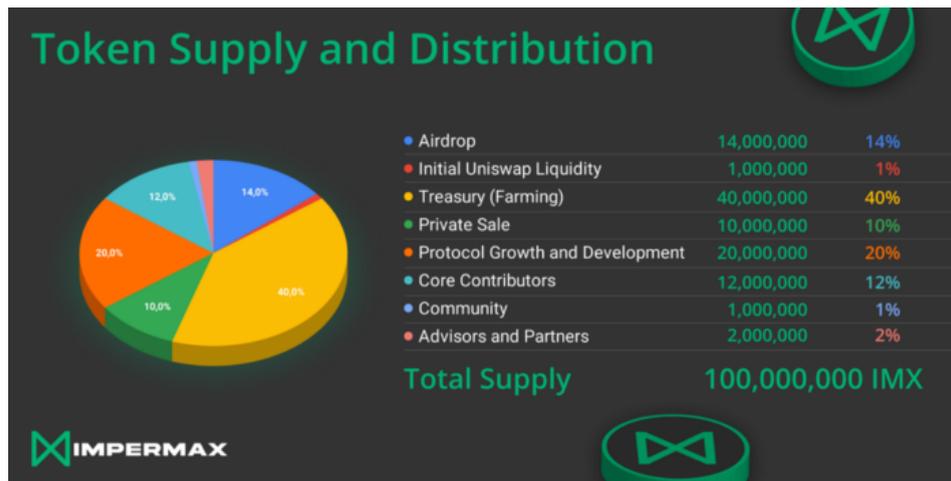


Figure 6: Initial Tokensupply and Distribution, Impermax.finance.

The Tokenomics plan allocates 40% of the supply to farming rewards over 4 years, where the protocol will distribute IMX tokens to borrowers based on the size of their loans [3]. The ability to farm tokens by borrowing is speculated to attract early borrowers and increase the interest rates they are willing to pay to lenders. The higher the leverage, the more yield you can farm. This is hoped to increase the demand for loans. [3, 4]

Full points are not awarded as the rater is missing long term incentivisation beyond the 4 years.

Score: 8

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: As outlined in section b) token holders are entitled to profits, and reserves generated by interest and fees. Fees from interests is automatically split, with lenders collecting at least 80% and Impermax collecting up to 20% of each payment. There is a 0.1% flat borrowing fee on each loan, which is similarly split. These fees can be adjusted by governance for further optimization. [3, 4]

Hence the protocol has an effective value accrual and distribution mechanism that makes the protocol self-sufficient

Score: 10

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: At present the IMX token is very illiquid with limited availability. The only pair listed according to Coingecko is IMX/WETH Uniswap pool with a +/- 2% depth of \$23000 [5].

Score: 1

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: Beyond Liquidity Provision on Uniswap and Uniswap equivalent on other L1 and sidechains, the token does not seem to be usable for other purposes.

Score: 2

3. Team

The Team section describes the quality of the team behind the protocol. The current version of Prime Rating favors 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 public and credible [1]. Both founding members show prior DeFi experience and suitable prior experience. For instance, [Brian Tinsman](#) provides convincing value addition to the team through his prior crypto economic consulting/ auditing experience [2].

Score: 9

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: [Simone Rigolon](#) has prior experience at a blockchain development company [3]. [Brian Tinsman](#) - next to the Cryptoeconomic and Blockchain consulting/ auditing experience mentioned in the prior sub-section - has extensive experience in Game Design, Information technology and data analysis [2].

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: The team engages in public debate, yet the following is relatively limited [4]. Based on feedback provided on the initial version of this report, the rater was informed that Simon Rigoion is known to appear in different Discords for Q&As multiple times and he's very approachable and supportive. Given this a score of 3 is justified.

Score: 3

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 current growth of the protocol, which is evidenced by the increase in growing volume might suggest successful allocation and coordination of resources [7]. Total Value Locked (TVL) shows mixed signals - with a spike around May be followed by a sharp decline and stabilisation around

5 M USD with TVL picking up again in the last 30 days [8]. This is particularly impressive given the small private sale allocation (10%) [6]. Mid to low tier VCs have been attracted to the IMX with Moonwhale and DuckDAO being the most notable among them. Nevertheless, IMX demonstrates the ability to attract capital [5].

The team seems to have taken a strong bet on a community-driven bootstrapping mechanism allowing 40% of the supply to be farmed over 4 years, where the protocol will distribute IMX tokens to borrowers based on the size of their loans [6]. This strategy has been chosen by current DeFi blue-chips like Uniswap and has proven somewhat effective.²

Overall, it seems that IMX has attracted sufficient resources and they can coordinate efficiently

Score: 8

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: The location of the admin keys is with the team at present [1]. Nevertheless, a path to decentralisation and handing over of admin keys to the community is believable, given that the whitepaper explicitly states that. *“the rights of the protocol and all future Impermax Finance’s products will be controlled by the IMX token holders”* and given the community-focused initial token distribution [2].

Score: 8

b) Extent of Governance capabilities (15 points)

Distributed governance allows the token holders to participate in the governance of open finance

² Uniswap has its own set of issues (e.g. voting participation/ reaching quorum) which might suggest that the mechanism of choice is not optimal.

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: The governance section in the [whitepaper](#) describes their governance philosophy as “permissionless, non-upgradeable” [2]. The governance will solely be able to adjust some parameters for optimisation. Adjustable parameters include:

Name	Default	Constraints	Description
Factory			parameters shared by all Lending Pools
<i>admin</i>			is the only address with the permissions required to change any parameter
<i>reserveManager</i>			is the address enabled to withdraw from the reserves of any Lending Pool
Borrowable			parameters adjustable for each Borrowable
<i>reserveFactor</i>	10%	∈ [0%, 20%]	explained in the following section
<i>kinkUtilizationRate</i>	70%	∈ [70%, 90%]	explained in section 3.4
Collateral			parameters adjustable for each Collateral
<i>safetyMargin</i>	250%	∈ [150%, 250%]	explained in section 3.3
<i>liquidationIncentive</i>	104%	∈ [101%, 105%]	explained in section 3.3

Figure 7: Parameters Subject to Governance, Impermax.Finance

At present, there does not seem to be any governance decision being made by the community. Expression of opinion seems to be limited to discord. An investigation of the [IMX roadmap](#) suggests this is to be implemented in the second phase [3].

Score: 8

c) Active Governance contributors (5 points)

Governance is a process that can be rather resource-intensive if executed well. To ensure good governance is practised 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: Given the limited (non-existent) governance infrastructure there is no possibility for Governance participation. As pointed out by the reviewer there is participation through discord possible hence a score of 2 is justified.

Score: 3

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: This rater was not able to identify a formal governance mechanism nor governance infrastructure. Debate is limited to discord.

Score: 1

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: There is no specified governance process.

Score: 0

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: The rater was unable to identify a legal entity associated with the protocol. Yet, the LinkedIn profile associated with Impermax suggests a private company located in Modena, Italy [\[1\]](#). Yet, no clear conclusion can be drawn from this.

Score: 0

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: Given the unclarity of the legal establishment this question cannot be answered.

Score: 0

Scorecard

1. Value Proposition	Points
a) Novelty of the solution	12 / 15
b) Market fit/demand	8 / 15
c) Target Market Size	7 / 10
d) Competitiveness within market sector(s)	7 / 10
e) Integrations & Partnerships	7 / 15
Total Points - Value Proposition	41 / 65
2. Tokenomics	Points
a) Is the token sufficiently distributed?	8 / 15
b) What is the extent of the token's capabilities?	8 / 10
c) Is the issuance model able to improve the coordination of the protocol?	8 / 10
d) Is the value capture model able to accrue and distribute value?	10 / 10
e) Is the token sufficiently liquid to enable active use and trade?	1 / 5
f) Are there any extrinsic productivity use cases?	2 / 10
Total Points - Tokenomics	37 / 60
3. Team	Points
a) Is the team credible and public?	9 / 15
b) Does the team have relevant experience?	7 / 10
c) Does the team participate and help shape the public debate?	3 / 5
d) Is the team able to effectively attract and coordinate resources?	8 / 10
Total Points - Team	27 / 40
4. Governance	Points
a) Admin Keys	8 / 20
b) Extent of Governance capabilities	8 / 15
c) Active Governance contributors	3 / 5
d) Governance infrastructure	1 / 10
e) Robustness of Governance process	0 / 10
Total Points - Governance	20 / 60

5. Regulatory	Points
a) Does the protocol have any legal accountability?	0 / 15
b) What is the quality of the legal jurisdiction?	0 / 10
Total Points - Regulatory	0 / 25
Total	125 / 250

About the Author: @thxthx7

Sources

Value Proposition

- [1] <https://www.coingecko.com/en/coins/impermax>
- [2] https://5c39d759-6e34-4efc-9287-8e9854baeb7a.usrfiles.com/ugd/5c39d7_4fe2a5f2b65e44998d4d39c4da98a7b9.pdf
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Tokenomics

- [1] <https://etherscan.io/token/0x7b35ce522cb72e4077baeb96cb923a5529764a00#balances>
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Team

- [1] https://www.linkedin.com/search/results/people/?currentCompany=%5B%2276381530%22%5D&origin=COMPANY_PAGE_CAN_NED_SEARCH&sid=JvU=
- [2] <https://www.linkedin.com/in/brianrtinsman/>
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Governance

- [1] <https://discord.com/channels/782387768411815947/782387769015009304/839260303480061972>
- [2] https://7d8757db-0e4b-429c-8eb9-418fb8b76da9.filesusr.com/ugd/5c39d7_4fe2a5f2b65e44998d4d39c4da98a7b9.pdf
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Regulatory

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