Fundamental

Prime Rating Report V2.0

Protocol: UMA
Version: 1.0
Previous Report: N/A
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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.

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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:

UMA is a protocol that powers decentralised derivatives. There are many derivatives platforms already built on Ethereum but UMA claims to be more resilient to bad actors through an innovation called priceless contracts that are powered by an optimistic oracle. Regular oracles constantly feed prices to smart contracts by transacting on-chain. UMA's priceless contracts only require on-chain activity from its optimistic oracle in the case of a dispute. Allegedly this makes pricefeeds less susceptible to exploits, such as corruption, manipulation, flash loan attacks and ad-hoc market events, seen in non-optimistic oracles. Priceless contracts and optimistic oracles are a novelty and therefore UMA is not a forked project.

Score: 7

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: Blockchain derivatives will always need a price feed to regulate liquidations and payouts of options. Currently the only way to achieve this is through oracles. UMA's priceless contracts and optimistic oracle could be a superior model to existing oracle solutions.

Currently Defi Pulse estimates the total DeFi derivatives market at ~$2.5 billion. Over the last year the cumulative TVL of Derivatives protocols has stayed more or less the same, as opposed to a lot of growth in other DeFi sectors such as Lending and DEXes:

Score: 7

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: Investopedia estimates the derivatives market at over $1 quadrillion on the high end. Currently derivatives markets are heavily regulated. These regulations create high barriers-to-entry. As blockchains scale and become more widespread and user-friendly, they could eventually become a faster, cheaper and fairer alternative to the current derivatives markets. And since blockchain derivative protocols require oracle solutions, this effectively means that as the derivatives market starts to move from CeFi to DeFi there is a huge potential for projects like UMA.

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: UMA claims that the oracle problem hasn't been solved yet because on-chain price feeds are too immutable. This might be true as we can see from a long history of flashloan attacks, but that doesn't necessarily mean that taking price feeds off-chain (for the most part) is the best solution. There are many other solutions such as querying multiple sources, increasing the frequency of queries, or using time weighted average pricing instead of simply calculating the mean or median of a price with your oracle. Having said that, the current oracle market is basically monopolised by Chainlink (currently at $8.5 billion marketcap). Even though Chainlink has not activated staking into its platform yet, it is used by most DeFi projects today. This leaves the door open for more strongly incentivised oracle solutions like UMA.

UMA's (priceless) synthetic tokens that are built on top of it are competing with other synthetic token generating projects such as Synthetics (SNX) and Mirror Protocol (MIR). And since UMA contracts rely upon an optimistic oracle, less on-chain activity is required when you plug your DeFi project into them, causing it to be less gas intensive, while remaining equally secure (allegedly). With Ethereum still struggling to keep its gas fees down this could give Synthetic tokens built on top of UMA an advantage over competing oracle solutions.

As it currently stands UMA has a mere $30 million TVL compared to SNX's $500 million TVL.

It's difficult to find the Daily Active Addresses statistic on UMA. However, according to this CoinYuppy article the amount of Daily Active Addresses has remained "stable" since at least 10/5/2021, although I personally see somewhat of an upward trend in that chart.

Score: 5

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: UMA's priceless contracts have been used to create derivatives and synthetic tokens in a number of projects such as PieDAO (for KPI options), Mini Mario Winter Cash (synthetic token that pegs to the price of BCH) and OPEN Dollar (a yield dollar that represents a fixed-rate, fixed-term loan). Together these projects have a cumulative TVL of $5.73 million. But actually the biggest project by TVL that's built on UMA seems to be their own KPI option that is linked to the amount of integrations UMA will be able to pull off before 12/30/21 (TVL $3,75 million). According to UMAverse the TVL of all protocols built on top of UMA is currently sitting at $107 million (this number differs from the DefiPulse derivatives number probably because DefiPulse only calculates the Synthetic contracts'

TVLs and not other UMA use cases such as Range Tokens and KPI futures). Although there has been a recent spike of 50% in a week, according to Token Terminal.
UMA's largest partnership is with REN protocol, with whom they worked together to launch a renBTC backed yield dollar called uUSD.

Score: 8

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 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)?

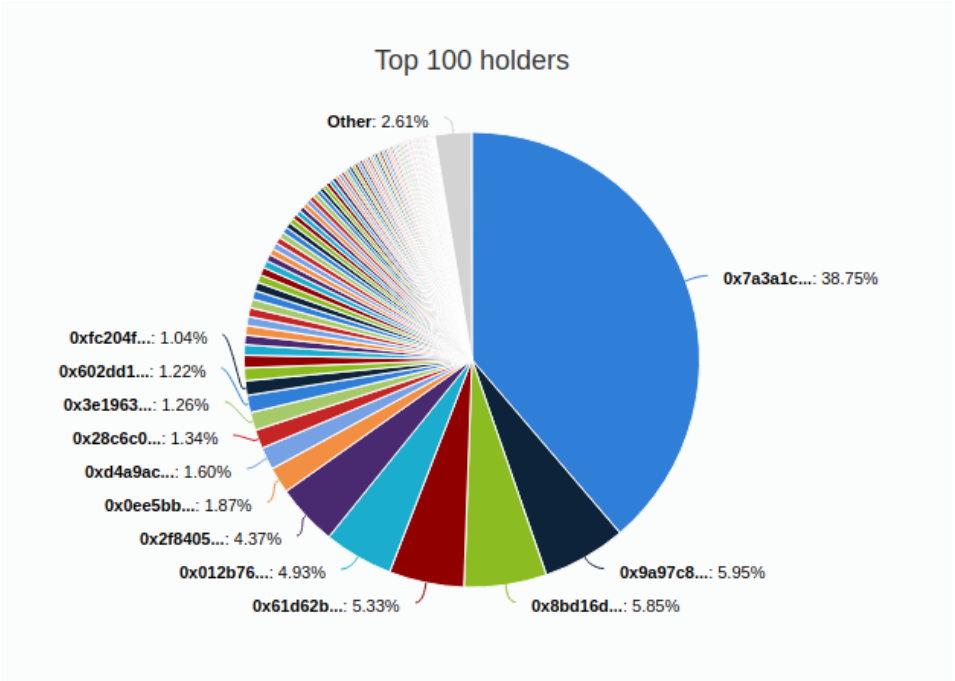
Answer: UMA's Initial distribution was: 48.5% investors + founders + early contributors (locked until 2021, 4 year vesting after that), 35% Devs + UMA users (treasury), 14.5% future token sales, 2% Uniswap LP. This "Initial Uniswap Listing" was launched on 29/04/2020.

The "investors + founders + early contributors" wallet is apparently coined the "foundation wallet" which is how I will refer to it onwards from here on.

Having almost half of the supply in the foundation wallet is quite worrisome from a decentralisation perspective. However, these tokens are locked until 2021, with a 4 year vesting schedule afterwards. Furthermore the team has "pledged" that it will not use this wallet to participate in voting when the tokens become liquid. This would mean that if the team holds true to its pledge, the initial voting power is 100% in the hand of the community that bought tokens from the Uniswap listing. As time goes on more of the foundation wallet, treasury tokens (35%, released through grants) will join circulation and compete for power over the DAO.

From an incentive perspective, 35% allocated to the treasury for development and liquidity mining, is also quite low compared to nowadays standards.

UMA's current distribution is:



Of these holders the biggest one by far is 0x7a3 with a 38.75% proportion. According to one of their team members in their Discord this is the “foundation wallet” that’s being used for development and liquidity mining.

Also the current top 100 UMA holders control ~97% of the total supply. This is not unseen, but definitely not great, especially compared to its competitors such as LINK and SNX (~80% and ~90% respectively).

Score: 5

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: UMA tokens are required for both voting in the DAO as well as voting on disputes originating from the optimistic oracle. It is also one of the whitelisted tokens to be used as collateral for creating synths.

Score: 5

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: With 35% (currently valued at ~$300 mil) being allocated to the treasury for things such as

development and liquidity mining, there is potentially a very significant incentive for community members to build on top of UMA.

Another less significant form of issuance is the inflation rate of 0.05% used to take value from apathetic voters and transfer it to active voters in the community. Which is a great idea, but I expect it hardly makes a difference at such a low rate.

Score: 3

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: Contracts built on top of UMAs optimistic oracle rely upon its Data Verification Mechanism (DVM). There are two ways in which these contracts have to pay the UMA to use it.

The first one is a simple flat fee (called a "final fee") for every time it requests a price feed. Because UMA is built optimistically this payment only occurs in the case of a price dispute or a contract settlement and therefore doesn't seem like a very strong value accrual mechanism on its own.

But there is another payment that contracts built on UMA have to perform, called the "regular fee" which is sort of a rent fee. This regular fee is paid per time interval and it grows with the value of the contract that is depending on that particular price feed. If a higher TVL is secured by said price feed, the cost of the price feed per time period grows.

This means that the more the market trusts contracts built on top of UMA (i.e. UMA oracles are doing a good job) the higher the total rewards paid out to UMA token voters.

The UMA token also uses another (built-in) form of incentivised governance model. Voters will be rewarded in UMA using 0.05% annual inflation. Active voters are effectively paid double since 48.5% of the UMA tokens have pledged not to vote.

UMA tokens can also be used as collateral for priceless contracts (such as synthetic tokens) but since there is a long, ever increasing, list of other whitelisted tokens that can be used for this, this doesn't add much to the value proposition of UMA.

Score: 7

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: UMA has a marketcap of $562 million and a 24h trading volume of $29 million across 93 exchanges, including all of the blue chip CEXes and DEXes. Therefore UMA is a highly liquid token.

Score: 5

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: Although UMA is currently not yet whitelisted on either Compound or Aave, there is currently an ongoing proposal (with seemingly significant support) to allow UMA tokens as collateral for lending on Aave.

However there is also some ongoing discussion about whether this might open up an attack vector where borrowers could acquire enough UMA tokens to corrupt the DVM. It seems that the way the DVM is set up it might actually harm the utility of the UMA token as collateral.

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: The team has been fully doxxed. The two founders and one of their advisors have worked for Goldman Sachs, an institution that would not seem to benefit from a flourishing DeFi sector. The rest of the team seems to also be coming from more of a financial background rather than a blockchain background.

Score: 7

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: The founders and one of their advisors have relevant backgrounds in the sense that most of them have a history in finance. Therefore they should be well versed in derivatives and risk

assessment. On the other hand only one of their team members seems to be a full stack blockchain developer. For such a big project you would expect at least multiple full stack and/or solidity developers.

Score: 6

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: UMA uses its youtube channel to post a lot of content from their community calls but also more introductory and deepdive talks. Youtube is not a very strong medium for public debate though. The founder of UMA however is quite active on crypto twitter, where he tweets roughly every day about relative topics such as DAO treasury management and L2 liquidity issues.

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: UMA's IDO on uniswap sold out raising $520k. The team has reserved another 14.5 million UMA tokens (currently valued at ~$145 million) for future token sales. According to Crunchbase the team behind UMA, Risk Labs, has raised a total of $3.9 million from ZBS Capital and FinTech collective.

According to one team member the UMA treasury has been growing substantially over time in non-UMA assets. A blog post on this topic should come out before the end of this year.

But by far the biggest "fundraiser" of UMA was the allocation of 48.5 million UMA tokens to the foundation wallet at launch, currently valued at ~$485 million, which is said to be used for things such as developer mining and liquidity mining programs. However, whether one can actually put such a price on a foundation wallet with so many UMA tokens is an ongoing debate because it is impossible to dump these tokens without drastically moving the price.

Score: 6

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 this infographic the logic that runs inside the DMV (which lies at the heart of the oracle and the contracts built on top of it) is in control of UMA token holders, including the emergency shutdown option. This setup would make the UMA platform very decentralised as long as the token distribution is adequately decentralised, which it is not.

However, upon further questioning in the UMA Discord server I found out that all UMA DAO proposals require admin keys! Even though these admin keys can not influence the outcome of a proposal vote, they ultimately give the team the power to block any or all upgrades to the protocol that they might disagree with. Future DAO upgrades could change this (if the team allows it), but one wonders why 3 years after launch this still hasn't changed.

Score: 7

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: UMA token holders can use their tokens to govern two mechanisms: the UMA oracle's price feeds and voting (not proposing!) in the UMA DAO (on upgrades, whitelisting, etc). Both price feed votes and UMA DAO votes seem to be done in an on-chain manner using the voting app, where transactions are used to measure token holders' support. These transactions cost gas. Gas is expensive. To incentivise voter turnout (especially non-whales) UMA reimburses gas costs to voters.

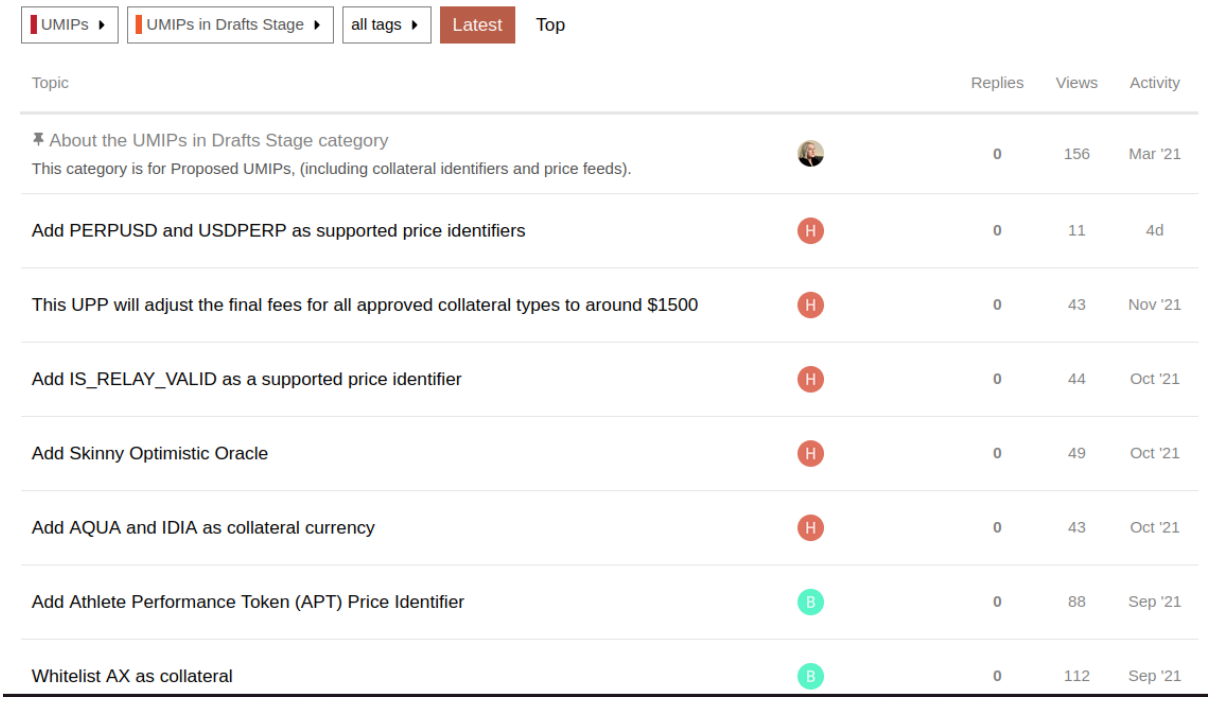
Score: 8

c) Active Governance contributors (5 points)

Governance is a process that can be rather resource-intensive if executed well. To ensure good governance is 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: If you click on UMA Improvement Proposals (UMIPs) in the UMA voter dapp the numbers are very worrisome. All proposals seem to have between 40-50 unique voting addresses. Given UMA's centralised token distribution I don't think this protocol is run very democratically. This issue can not be attributed to high gas fees on ETH since UMA has implemented a voting rebate mechanism to make voting equally attractive to all token holders.

The debate around UMIPs is done publicly by the team in UIMP Community Review Calls. But what about the community? The #voting channel in their discord seems to be more of a troubleshooting channel for the voter dapp. This leaves us with the UMA Discourse page as our last hope for community engagement, but looking at the amount of replies to the "UMIPS in Drafts Stage" doesn't paint a pretty picture:



Score: 1

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: The UMA voter dapp allows for UMA tokenholders to easily cast their votes on UMIPs and claim their governance rewards. It's also nice that small token holders can still earn money by active governance despite gas fees through the Gas Fee Rebate Program.

For earlier stage proposals and debate within the community mostly Discourse is used. There is also plenty of documentation to help with writing proposals and casting votes.

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: The UMIP Process consisting of 4 stages (Early Stage, Draft, Last Call, Final) seems like a rigid framework for proposals without overcomplicating things. Especially during the Early Stage UMA provides a team to support community members in writing up their proposals.

It's probably important to note here again that 3 years after launch still only team members have the power to admit proposals to the system.

Score: 5

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 company behind UMA called Risk Labs is located in New York. The company however is pretty clear on how they are not responsible for any faulty code:

> **4. Representations, Warranties, and Risks**
>
> **4.1. No Representation or Warranty**
>
> You expressly understand and agree that your use of the Service is at your sole risk.
>
> WE MAKE AND EXPRESSLY DISCLAIM ALL REPRESENTATIONS AND WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AND WITH RESPECT TO THE SERVICES AND THE CODE PROPRIETARY OR OPEN SOURCE, WE SPECIFICALLY DO NOT REPRESENT AND WARRANT AND EXPRESSLY DISCLAIM ANY REPRESENTATION OR WARRANTY, EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION, ANY REPRESENTATIONS OR WARRANTIES OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY, USAGE, SECURITY, SUITABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, OR AS TO THE WORKMANSHIP OR TECHNICAL CODING THEREOF, OR THE ABSENCE OF ANY DEFECTS THEREIN, WHETHER LATENT OR PATENT. WE DO NOT REPRESENT OR WARRANT THAT THE SERVICES, CODE AND ANY RELATED INFORMATION ARE ACCURATE, COMPLETE, RELIABLE, CURRENT OR ERROR-FREE.

Score: 10

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: Risk Lab's office might be located in New York, but according to this SEC Notice of Exempt Offering of Securities the company's jurisdiction of incorporation is the Cayman Islands. However:

"As a British Overseas Territory, the Cayman Islands is a common law jurisdiction and derives most of its laws and procedures from the English legal system"

So maybe the Cayman Islands isn't as bad as we thought?

Score: 4

Scorecard

1. Value Proposition	Points
a) Novelty of the solution	**7 / 15**
b) Market fit/demand	**7 / 15**
c) Target Market Size	**9 / 10**
d) Competitiveness within market sector(s)	**5 / 10**
e) Integrations & Partnerships	**8 / 15**
Total Points - Value Proposition	**36 / 65**

2. Tokeneconomics	Points
a) Is the token sufficiently distributed?	**5 / 15**
b) What is the extent of the token's capabilities?	**5 / 10**
c) Is the issuance model able to improve the coordination of the protocol?	**3 / 10**
d) Is the value capture model able to accrue and distribute value?	**7 / 10**
e) Is the token sufficiently liquid to enable active use and trade?	**5 / 5**
f) Are there any extrinsic productivity use cases?	**2 / 10**
Total Points - Tokenomics	**27 / 60**

3. Team	Points
a) Is the team credible and public? (No, Partly, Yes & Anon , Yes & Public)	**7 / 15**
b) Does the team have relevant experience?	**6 / 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?	**6 / 10**
Total Points - Team	**22 / 40**

4. Governance	Points
a) Admin Keys	**7 / 20**
b) Extent of Governance capabilities	**8 / 15**
c) Active Governance contributors	**1 / 5**
d) Governance infrastructure	**8 /10**
e) Robustness of Governance process	**5 / 10**
Total Points - Governance	**29 / 60**

5. Regulatory	Points
a) Does the protocol have any legal accountability?	**10 / 15**
b) What is the quality of the legal jurisdiction?	**4 / 10**
Total Points - Regulatory	**14 / 25**
Total	**128 / 250**

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