Protocol: Hegic
Version: Hegic888
Previous Report: None

Date: 1-3-2021
Author: Zeb

Please fill in all questions with a written explainer, any relevant links and score per variable based on the Fundamental Review Process V 1.0. Insert the scores per variable in the scorecard at the end of the report. Please follow the Rating Process when creating and submitting a report.

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.

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? In general, forks without any newly added functions are considered subordinate to the protocol they forked.

Answer: Hegic was launched early 2020 when option protocols were not a big sector yet within crypto. Deribit had them but you needed KYC and Opyn was Derbit but without KYC. Hegic came along with 2 defining features; a token and fee sharing with token holders. This was new within the option sector of crypto, but not new within crypto. Hegic also introduced LPs instead of option writers. All together, Hegic did not invent new financial instruments or far-out-there crypto innovations.

Score: 6

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. 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: Hegic had [900 options traded](#) with a total value of almost $35m within its first month, and has [accumulated](#) about $5M in fees (1-3-2021). Hegic has been able to gather $57.2M in [TVL](#). This shows that there is indeed a market for these products, but it is not as high as certain other sectors within DeFi have been able to accomplish.

Score: 10

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: Options within the traditional finance system are a huge market. It is clear that Hegic (and other option protocols) are only at the beginning of scratching the surface of this potential. At this point most protocols only let you buy options on cryptocurrency prices. When this moves towards other commodities as well, crypto has a big chance of swallowing the market due to its global and permissionless nature.

Score: 10

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). The relative comparison can become rather subjective, to solve this the score standardizes the results in fixed categories.

Answer: Hegic has a slew of [competitors](#); [Deribit](#), [Opyn](#), [FinNexus](#), [Primitive](#), [Opium](#), [Auctus](#), Powertrade, [Pods](#) and Hedget, to name the most well known. Within this range of competitors, Hegic is at the top of DeFi Pulse (#29), with Opium coming in at #58 and Opyn at #60 (1-3-2021). When it comes to technology and features, Hegic does not stand out as easily as when it comes to TVL. The chance of it losing its top spot is very realistic, and the option market will only grow further. Protocols like Opium, who do more than only options, will probably take a bite out of the pie soon enough. For now Hegic has a good position and community support, but it will need to stay innovative.

Score: 8

Tokeneconomics

The Tokeneonomics section of the review 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.

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: From the Hegic website:

"Total supply will be split up in 6 blocks:

— 3% were distributed during IBCO (Initial Bonding Curve Offering)

— 22% will be used to provide liquidity to bonding curve contract

— 5% will be allocated to provide liquidity to a DEX liquidity pool

— 40% will be distributed as rewards to Hegic Protocol users (option holders and liquidity providers)

— 10% will be allocated to the Hegic Development Fund (HDF). This amount is subject to linear vesting among 48 months after IBCO end (12/09/2020)

— 20% will be allocated to reward Early Contributors. This amount is subject to linear vesting among 24 months after IBCO end (12/09/2020)"

The token distribution of Hegic clearly shows it is a project from before the DeFi Summer. It reserves well over half of its tokens for purposes outside of the team and private investors. When looking at the holders of HEGIC we can see the following addresses holding major percentages of the supply. From Etherscan (25-2-2021):

1. **Hegic: Liquidity M&U Rewards: 38.62%**
2. **A token holder: 18.67%**
3. **Early Contributors: 16.66%**
4. **Development Fund: 9.15%**
5. **Hegic Balancer Pool Fund: 4.99%**

The next 8 biggest holders are all contracts or exchanges. The next 'normal' holder only has 0.066% of the supply. Having 40% of the tokens going to users is a good amount. The 10% fund allocation is looking rather small nowadays. A year after the protocol was announced, not much has changed yet in the distribution. Compared to most protocols of today, Hegic scores well.

Score: 13

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

What are the different merits of the token? Is the token useful in the protocol? Does the token allow the holders to participate in governance or influence the protocol in any way?

Answer: From this [blog](#) (3-12-2020):

1. *"Governance: Owners can participate in governance to determine things like rates, size of settlement fees, actual price coefficients or types of assets supported.*
2. *Holder token is entitled to a 30% discount when buying contracts excluding the payment fees determined by the Ethereum network - heavily dependent on current [Gas](#) fees.*
3. *Hegic rewards for liquidity providers*
4. *Staking: to collect payment fees from the platform"*

The token does exactly what Prime Rating suggests for the highest score: *The token provides effective utility, revenue, and governance rights to the holder.* **By doing so it has accumulated $5M in fees in five months, which also suggests the revenue is quite decent.**

Score: 10

Is the issuance 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: There is a [token supply cap](#), and tokens are being issued through [liquidity mining](#) and by using the protocol. Fees are being paid with the underlying tokens instead of the HEGIC token. Since options need liquidity and the protocol users, it is not a bad setup. It is a bit simple compared to newer distributions, which also include community or developer mining and other distribution schemes. The governance of this project also is [limited](#), so this cannot be changed, as far as mentioned within the (sparse) [docs](#) of Hegic. There is a 10% allocation of tokens towards the dev fund, but there is no allocation of fees or HEGIC rewards going towards the dev fund. This could bring issues down the line if the devs do not create other sources of income.

Score: 6

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

A value accrual and distribution mechanism can help improve the merit 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 mentioned above, users and liquidity providers get rewards in return, which is a good incentive for the system. Sadly usage does not mean any increase of value for the dev fund, let alone a decentralized treasury. Stakers can vote on certain parameters and get rewarded for staking, which is a well trodden path by now.

Score: 6

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: Hegic is well below the liquidity of previously reported on Blue Chips of DeFi. It is ranked #273 on CoinMarketCap with $4,420,227 in daily volume. Its liquidity is mainly spread between Binance, OKEx, Uniswap, 1inch and Sushiswap. For sure no bad, but not a perfect score.

Score: 4

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

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 creator is the notorious [0mollywint3ermutz](). A well known, but anonymous developer (group?). Has made [999]() (lol) commits on Github this last year. Has [an investment fund]() together with Andre Cronje. For an anonymous dev, she has a reputation.

Score: 10

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: Nothing to go off on, except interviews where we have to believe on the word of the dev(s). Has [said]() herself: *"The only fact about my background is developing Hegic. Well, I'm a person with no social capital or reputation in the crypto and DeFi spaces and I'm building the Hegic protocol from scratch. The crypto community can only judge me by what they can see by themselves in [my code that is open sourced on GitHub]()"*

Score: 0

Does the team participate and help shape the public debate? (10 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: Yes. Her account is well known, she participates in the public debates and collaborates. However, she is anonymous, which hampers participation a little bit.

Score: 8

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? How well are resources managed and used?

Answer: The project is purely surviving off of the dev fund and early contributors allocation, of which most is still there, 1 year after the announcement. As earlier explained, the early contributors also consisted of some investors. There is no idea of how much money was invested in production. The Hegic protocol has had 1 big upgrade within the last year. This could be due to constrained funds. There is no fee allocation towards a treasury, so this could become an issue. If Hegic really wants to compete with other upcoming protocols, it will need more funding. The one trick up its sleeve is its connection with Andre Cronje. By combining with yEarn it could get funding plus devs. This is not happening or publicly planned at this point in time.

Score: 6

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.

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: There are admin keys, what they do is clearly explained on github (30-5-2020):

"Hegic Protocol V1.1 contracts admin key holder CAN:

1. *call setLockupPeriod function to change the lock-up period for liquidity providers (can only be <60 days)*
2. *call setImpliedVolRate function to change the Implied Volatility proxy that influences the fees*

3. *call setMaxSpread function to change the maximum spread for the swap on the Uniswap Protocol*

Hegic Protocol V1.1 contracts admin key holder CAN'T (after 90 days from the day of contracts deployment: 30/05/2020)

1. *can't withdraw users' funds from the pools contracts using the withdraw function*
2. *can't lock users' funds on the liquidity pools contracts calling the call lock function*
3. *can't unlock users' funds on unexercised active contracts calling the unlock function*
4. *can't send users' writeETH / writeERC tokens calling the transfer function*
5. *can't exercise users' active options contracts calling the exercise function"*

**The admin keys are in the hands of Molly. After an initial bug locking up 150 ETH which were locked for ever, it was demonstrated Molly didn't unlock these stuck tokens. According to [Messari](#): "*The team plans to transition governance to the community when Hegic reaches at least 100 monthly active holders and writers."*

For now there is no DAO and the website has no clear path towards further decentralization.

Score: 6

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: At this point in time there is no governance forum or way of voting with tokens. Molly has [communicated](#) that token holders will be able to vote on certain parameters. "*Hegic Improvement Proposals (HIPs) are intended to be the main governance mechanism to submit improvements to the protocol. The process will be implemented once the protocol accumulates enough traction."*

Score: 0

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: There is no governance forum, neither is there a governance channel even in the discord. Molly seems to be the only public 'governor'. The dev channel within discord is active though.

Score: 1

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. Does the

protocol have a formal governance process? How robust is the governance process and does it promote good governance?

Answer: As mentioned above, there is none.

Score: 0

Governance 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: No documentation outside of github, no gov channels, no public work towards getting there.

Score: 0

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.

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: No. The team is anonymous and has no accountability communicated in any way. It did reimburse users who got affected by a bug, but this was not due to direct legal reasons.

Score: 0

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:

Score: X

Is the protocol (able to become) legally compliant? (5 points)

Is the protocol able to acquire the necessary licenses and supervision to be able to operate in the traditional regulatory environment? Has the protocol already acquired such licenses?
Answer:

Score: X

Scorecard

Value Proposition	Points
1. Novelty of the solution	**6 / 15**
2. Market fit/demand	**10 / 15**
3. Competitiveness within market sector(s)	**10 / 10**
4. Novelty of the solution	**8 / 10**
Tokeneconomics	**Points**
1. Is the token sufficiently distributed?	**13 / 15**
2. What is the extent of the token's capabilities?	**10 / 10**
3. Is the issuance model able to improve the coordination of the protocol?	**6 / 10**
4. Is the value capture model able to accrue and distribute value?	**6 / 10**
5. Is the token sufficiently liquid to enable active use and trade?	**4 / 5**
Team	**Points**
1. Is the team credible and public? (No, Partly, Yes & Anon , Yes & Public)	**10 / 15**
2. Does the team have relevant experience?	**0 / 10**
3. Does the team participate and help shape the public debate?	**8 / 10**
4. Is the team able to effectively attract and coordinate resources?	**6 / 10**
Governance	**Points**
1. Admin Keys (Yes, Multisig, Multi-sig and Timelock, None)	**6 / 20**
2. Extent of Governance capabilities	**0 / 15**
3. Active Governance contributors	**1 / 5**
4. Robustness of Governance process	**0 /10**
5. Governance infrastructure (rituals, docs, UI)	**0 / 10**
Regulatory	**Points**
1. Does the protocol have any legal accountability?	**0 / 15**
2. What is the quality of the legal jurisdiction?	**X / 10**

3. Is the protocol (able to become) legally compliant?	**X / 5**
Total	**104 / 220**

Author: Zeb, https://twitter.com/Zeb_dyor