Risk Assessment - gOHM Collateral Asset on FiRM

Useful Links

➢ Coingecko: https://www.coingecko.com/en/coins/olympus
➢ Website: https://www.olympusdao.finance/
➢ Github: https://github.com/OlympusDAO
➢ Medium: https://olympusdao.medium.com/
➢ Twitter: https://twitter.com/OlympusDAO
➢ Main Discord: https://discord.gg/olympusdao
➢ Work Discord: https://discord.gg/olympuswork
➢ Bug Bounty: https://immunefi.com/bounty/olympus/
➢ Docs: https://docs.olympusdao.finance/
➢ Snapshot: https://snapshot.org/#/olympusdao.eth
➢ Forum: https://forum.olympusdao.finance/

Background

"Olympus is a protocol on the Ethereum blockchain with the goal of establishing OHM as a crypto-native reserve currency. It conducts autonomous and dynamic monetary policy, with market operations supported by the protocol-owned Olympus Treasury."

"OHM serves a need in the market gap between fiat stablecoins and volatile crypto assets, providing relative stability and scalability underpinned by the protocol's Range Bound Stability ("RBS") system. RBS is the flagship system of Olympus' autonomous monetary policy."

"OHM holders can choose to stake OHM for gOHM, which receives the Base Staking Rate ("BSR"). During Olympus' bootstrapping phase, this rate was intended to reflect the expected growth of the network. The BSR now serves as a demand driver for OHM as well as a reference rate against which productive economic activity (lending, liquidity provision, etc.) is measured. Furthermore, it acts as a foundation for OHM bonds to develop a yield curve across different expiries."

The BSR is set by governance.
gOHM = OHM * Index

Gohm holders ("ohmies") have historically had a large appetite for leverage using DOLA which can be observed in [Fuse Pool 6, Tetranodes Locker](#). Despite attempts by Inverse Finance to close down this Fuse pool and reclaim the DOLA liquidity there, ohmies are resistant to deleveraging and continue to pay a double digit borrow APR even today.

Lending vs. gOHM is available in a few alternative variable rate markets. Silo Finance, Impermax, Vesta Finance. [FraxLend](#) which has scaled massively due to demand. The current borrows against gOHM collateral are 2.95M Frax and current *variable* lending rates are 8.63%One can assume there will be a significant appetite for fixed rate lending from the Ohmies, particularly given this prevailing variable rate on Fraxlend.

## Protocol Analysis

Org. Structure

☐ **Is the Protocol a DAO? How is it governed eg. delegates , snapshot (10)**

Olympus Finance is a DAO governed with snapshot voting. A council of 7 active veteran members with distinct roles & Diverse capabilities to facilitate off-chain deliverables. Olympus Finance is governed using [snapshot](#).
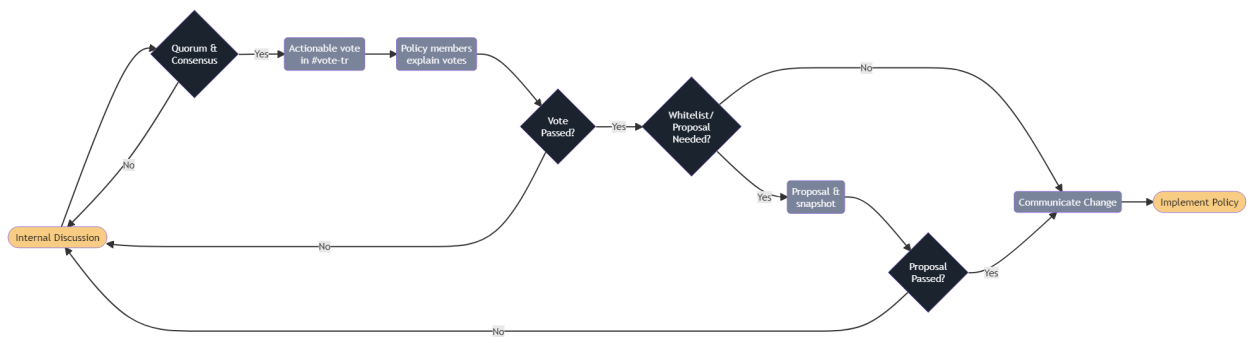
Olympus Finance has a thorough decision making process with plenty of checks and balances.
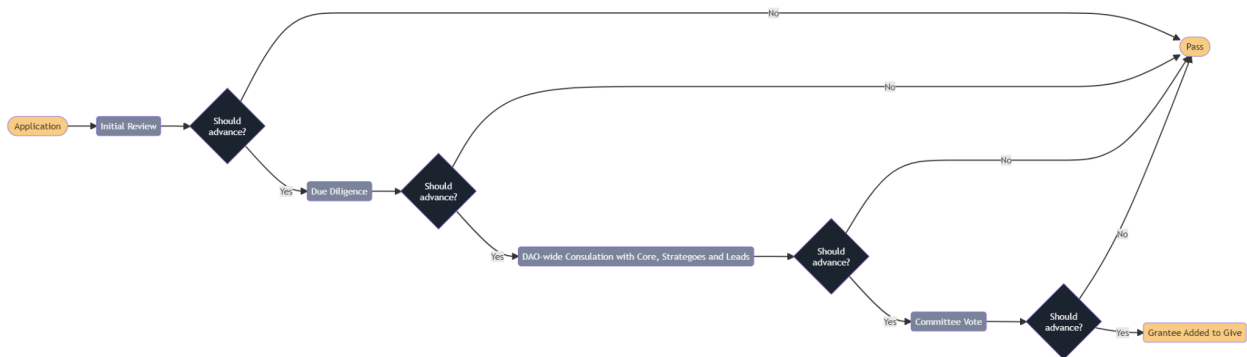
Treasury Decision Process:
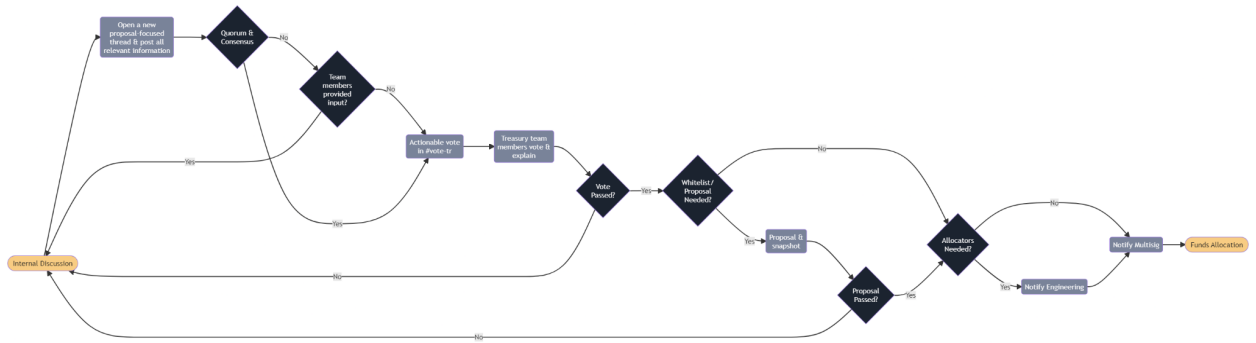
Policy Decision Process:

Grant Decision Process:

☐ **Does Protocol publish analytics / transparency via Dune or similar? (10)**

Analytics are limited, displayed on their [dashboard](#) which is pulled from [subgraphs](#) which is an ongoing work by the TWG outlined in their [Q3 2022 Review](#). Olympus Finance offers its users full financial / governance / and audit [transparency](#).

☐ **Working group structure (10)**

The Olympus Finance team is separated into 10 departments or working groups comprised of 46 contributors found [here](#).

☐ **Are core contributors compensated / Doxed? (5)**

==Unclear== if the contributors are doxxed at this time but they seem well paid with the Q3 review reporting an outflow just under $1.1M for contributor payments.

DAO Outflows
During Q3 2022, OlympusDAO expenses and outflows continued to decrease.

	Actual Q3	Recurring Q3
DAO Contributor Payments	1,093,513	1,093,513
Services, Subscriptions, Other Operational Costs	111,995	111,995
Audits	123,287	61,644
Operating Expenses	**1,328,795**	**1,267,151**
Grants Funding*	310,928	0
Zeus Reimbursement Per OIP-98	115,000	0
Legal Fees	419,031	0
Total Disbursements	**2,173,753**	**1,267,151**

Inverse Finance DAO contributors have interacted extensively with the team at Olympus for over a year, with an emphasis on the Olympus Pro (now Bonds Protocol) bonding program.

☐ **Any known controversies in crypto space (5)**

Rebasing tokens took the crypto world by storm in 2021 with a crash in sentiment towards the end of the bull market as many became more aware of how emissions economics work. Despite this period of negative sentiment, the team pressed on with an impressive treasury and the vision to create a reserve currency. We are unaware of any controversies that would affect this proposal.

☐ **Do they have a security or risk management team (0)**

It doesn't appear that there is a dedicated risk management or security team. It's likely that this role falls under dev work.

Multisig Structure

☐ **Is protocol transparent of multisigs and signers, List/links of multisigs, purpose, and setup x of x (10)**

Olympus Finance has two multisigs,

DAO(4 of 8): 0x245cc372C84B3645Bf0Ffe6538620B04a217988B
The DAO multisig executes OIP approved transactions and code changes

Policy (3 of 5): 0x0cf30dc0d48604A301dF8010cdc028C055336b2E
The policy multisig executes changes that operate within an OIP approved framework.
(opportunistic governance executing within community approval framework)

☐ **Can multisigs interfere with collateral options? EOA minting (10)**

No

Influence, Reputation, and Partnerships

☐ **How long has the protocol been around , have they endured long bear markets? (7)**

==December 15, 2021 OHM v1 was listed on Coingecko. Inverse Finance and Olympus Finance were founded within days of each other.== As mentioned above, Olympus has persevered through the bear market with an intact treasury, team, and community.

☐ **Have they been exploited and how was it handled , was value restored to users if affected. (7)**

Olympus Finance sub dao Bond Protocol formerly known as Olympus Pro was exploited on October 21, 2022.

30K OHM ($300k) was stolen due to failure in the BondFixedExpiryTeller contract. The contract lacked a validation input in the "redeem() function," which allowed the attacker to trick input values to redeem funds, Peckshield said.

It should be noted that Olympus DAO manages a sizable treasury currently $236,171,608 much of which in stablecoins. The DAO also has $65,413,531 in protocol owned liquidity.

☐ **Current and notable past partnerships , are they a net positive on the DEFI space (10)**

Olympus Finance Partners

Audits & Bug Bounties

*Previous and Ongoing

☐ **Audits & Bounties (10)**

Olympus has been audited many times along its three stages. As Olympus Finance lowered its rebasing rewards, each upgrade required a migration to a new contract which was again audited. They have used multiple audit firms some of which Inverse Finance has opted to use. Peckshield, Omniscia, Spearbit, Code4rena, Kebabsec. There is also a running immunefi bug bounty with an attractive $3,333,333 reward payout, Olympus Finance takes contract security very seriously.

[Olympus Finance Audits](#)
[Immunefi bug bounty](#)
[Oracle Implementation Audit](#)

Reward Payouts

☐ **Rewards paid, vulnerabilities found with severity (10)**

There have been a few bug bounties paid out from Immunefi, four in total and one internal bug bounty. Their current bug bounty program offers 4 tier levels to disclosed bugs, noticeably:

- Tier 1: For bugs/exploits which would lead to a loss of treasury funds, a flat reward of $3,333,333.
- Tier 2: For bugs/exploits which would lead to a loss of bond funds, a flat reward of $333,333.

Collateral Analysis

Oracles

☐ **Available Chainlink Oracles (10)**

gOHM markets use [chainlink OHM oracle + the index from the staking contract](#). Fraxlend uses this oracle implementation, there has also been extensive analysis and audit by a previous protocol on the [oracle solution](#) .

Note that Inverse would implement the Pessimistic Pricing Oracle solution currently implemented in the WETH market on firm, adding additional resiliency to a gOHM price feed.

☐ **Does the asset have a backup oracle** (0)

No

☐ **Any advanced oracle implementation required (8)**

The OHM Chainlink oracle needs to be multiplied by the Index from the staking contract to reach gOHM pricing.

Liquidity, and Liquidations

☐ **AMM liquidity, (pools over 100k)**

Asset	# Markets on Ethereum	# CEX	Primary Liquidity ($)	Secondary Liquidity ($)	Alerternative Liquidity ($)
gOHM	3	0	gOHM/WETH $1.7M	gOHM/USDC $1.1M	gOHM/TEMPLE $2.5M
OHM	5	0	OHM/WETH $32.4M	OHM/DAI $30.6M	OHM/BTRFLY $1.5M

☐ **CEX markets with depth if available**

N/A

☐ **Liquidation Routing, Do liquidations require a wrapper?, accessibility (7)**

Liquidators will be required to use the ohm staking contract to unwrap gOHM
Liquidity is sufficiently available for liquidators on Balancer in the form of two pools for high efficiency. OHM/WETH and OHM/DAI. While DAI and DOLA don't have a sufficent direct pairing it can easily be routed DAI/WETH > USDC > DOLA to repay loans.

☐ **Peg Risk if any (10)**

N/A

Tokenomics

☐ **Contracts, are they upgradable? (10)**

gOHM: 0x0ab87046fbb341d058f17cbc4c1133f25a20a52f

OHM: [0x64aa3364f17a4d01c6f1751fd97c2bd3d7e7f1d5](0x64aa3364f17a4d01c6f1751fd97c2bd3d7e7f1d5)

☐ **Market Cap History , Price History , Volatility**

[Market Cap](): $268,411,024
Current Price: $9.59 (0.00695 ETH)

Like many tokens OHM has lost much of its value in the bear market, they have slowly wound down from a 5 digit staking APY. The price has appeared stable since September 2022.

☐ **Coingecko / Coinmarket cap**

[Coingecko]()
[Coinmarketcap]()

☐ **Emissions Policy, what are emissions used for? (10)**

Emissions are directed towards Olympus Finance stakers and bonders.

The staked OHM receives a Base Staking Rate ("BSR") that serves as a demand driver for OHM. During Olympus' bootstrapping phase, this rate was intended to reflect the expected growth of the network. The BSR now serves as a demand driver for OHM as well as a reference rate against which productive economic activity (lending, liquidity provisions, etc.) is measured.

Bonding through range bound swaps is how Olympus Finance trades protocol owned OHM for treasury assets it can use to back the reserve currency and provide liquidity. The most notable bond would be DAI.

Utility & Use Case

☐ **Does the Token have utility, Can it retain the utility while supplied to FiRM? (10)**

Ohm has an annualized rebase of 7.3%. gOHM collateral allows for users to wrap staked ohm which retains its rebase while deposited into FiRM as collateral. gOHM is also used to vote in Olympus Finance governance and FiRM grants the ability to use snapshot voting while gOHM deposited. FiRM is the first market that allows Olympus Finance to retain all of its utility while enabling borrowing vs the token.

☐ **Liquid or locking feature (10)**

gOHM is always liquid and can be unwrapped, unstaked, and sold at any time.

☐ **Goal of the token, where is value derived from? (10)**

Ohm is a censorship resistant reserve backed currency aimed to preserve purchasing power via long-term stability. Each OHM is backed by a minimum of $1 worth of treasury assets, but is not pegged to it. If the price were to ever drop below $1 the protocol would buy back and burn OHM as necessary.

Conclusion

In conclusion, the due diligence conducted by Inverse Finance's Risk Working Group on gOHM by Olympus DAO has determined that gOHM is a suitable collateral for the fixed-rate lending market, FiRM. The gOHM token has demonstrated a strong track record of stability and has the necessary infrastructure in place to support its use as collateral on the platform.

The Olympus DAO team has a clear understanding of the lending market and has implemented appropriate risk management measures to ensure the safety and security of user funds. This includes one of the largest active bug bounty programs currently available, $3.3M in available rewards on the ImmuneFi platform.

The Risk Working Group has evaluated gOHM's technical and economic characteristics and has determined that it possesses the necessary attributes to be used as collateral on the FiRM platform. The token is liquid, is paired with other reliable tokens (wETH, USDC, AVAX, FTM, Temple) in deep LPs on different platforms (Uniswap, Sushi, Trader Joe, Spookyswap) and several chains (Ethereum, Arbitrum, Avalanche, Polygon, Fantom), thus addressing most SPOFs. gOHM also has an elegant oracle solution, making use of a Chainlink oracle for OHM and simple indexing.

Furthermore, the team behind Olympus DAO has shown a strong commitment to the development and growth of the project, which has been evident in their continued activity and building throughout the second half of 2022. The team is actively engaged with the community, and they regularly update and communicate their development progress and road-map.

Overall, the Risk Working Group is satisfied with the findings of this due diligence report and is confident in the ability of gOHM to serve as a reliable and stable collateral on the FiRM platform. Based on these findings, the Risk Working Group approves gOHM as collateral on FiRM with an initial Collateral Factor (CF) of 66%. This figure matches the current CF for gOHM on Fuse Pool 6, that has active DOLA loans, and is lower than CF on Fraxlend, 75%. The addition of gOHM as collateral on FiRM will provide users with more options to secure loans and we are excited to see it bring new users of the platform.