[Temp Check] Onboard OpenBlock as Aave Risk Service Provider

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Summary

OpenBlock Labs is excited to submit a proposal for a 6-month engagement to assist the Aave DAO with risk management. OpenBlock is an established provider of economic modeling for leading protocols in the space, including: EigenLayer, Lido, Arbitrum, Solana, Sui, Uniswap, Scroll, Fuel, Linea, Mode, and many others; we have also received a small grant in the past to study incentives on Aave. OpenBlock Labs is based in San Francisco, CA, dedicated to fostering sustainable growth within decentralized protocols through a data-driven platform.

Motivation

OpenBlock is backed by notable figures in the crypto space, including: Foundation Capital, Electric Capital, Circle Ventures, AlleyCorp, and others. Our team of 40+ has backgrounds from Stanford, a16z, Carnegie Mellon, Meta, Palantir, and other top-tier institutions; the highly technical background of our team makes us confident that OpenBlock is uniquely positioned to tackle a problem of this nature.

OpenBlock brings a distinctive advantage to Aave by harnessing its deep expertise in LSTs, which dominate the supplies of Aave. Our extensive liquidity modeling has delved into the intricate dynamics between LSTs and lending activities. Additionally, OpenBlock is at the forefront of LRT analysis, which will be a critical asset class for Aave to maintain its dominance in the market. We believe our unparalleled expertise in this domain will allow Aave to be a first mover with LRT integrations, while upholding rigorous risk assessment standards

Specification

OpenBlock will conduct a continuous analysis of new asset listings and propose adjustments based on a number of factors including, but not limited to:

- Market Risk:

We will leverage time-series analysis to assess liquidity trends, employing econometric models like GARCH to account for volatility clustering in liquidity and volume. This will enable us to forecast liquidity scenarios and ascertain liquidity risks associated with each token.

- Agent-Based and Monte Carlo Simulation:

Simulating short-term dynamics like liquidation cascades, such as those driven by liquidator bots with established arbitrage strategies, will be central to our modeling. We also plan to observe the behavior of various network participants, and how they have previously reacted to market events. These interactions will provide insights into how the Aave platform might evolve over time and how various factors could impact its security and asset distribution. Monte Carlo simulations can help predict different scenarios, considering factors such as protocol upgrades, changes in market conditions, and variations in user behavior. These models will provide us with a probabilistic understanding of outcomes and value-at-risk.

- Counterparty Risk:

Counterparty risk pertains to the governance of a given asset and degree of centralization. It is assessed based on factors such as: the level of decentralization of the asset's governance (measured by power law distribution and Gini coefficient calculations), historical security measures taken by the protocol (smart contract audits, economic simulations), smart contract functionality and complexity (enabling withdrawals, supply caps, whitelists), historical risk mitigation in black swan events (kill-switches, speed of governance, depegging scenarios), the number of holders of the asset, and the general market sentiment of the project.

We outline some of our past work on these topics below.

Past Experience: EigenLayer

OpenBlock has diligently conducted comprehensive data collection and monitoring of staking dynamics in our engagement with EigenLayer. Furthermore, we've executed Monte Carlo simulations to forecast staking behavior among validators and LSTs. Our platform offers unparalleled insights into liquid restaking tokens (LRTs) and their liquidity levels across various DeFi integrations. Our ability to remain current on emerging asset classes will prove invaluable for meeting Aave's risk management requirements.

Past Experience: Lido

When engaging with Lido, OpenBlock utilized advanced data intelligence and modeling to research the dynamics of on-chain liquidity providers and traders of Lido's stETH. In completing this analysis, we studied the liquidity needs of potential liquidations on Aave, and built models to recommend incentives to attract sufficient DEX liquidity for these markets. OpenBlock's volume profiling models discovered much of the volume was driven by bots engaging in risk-free arbitrage using stale prices from LPs. This finding was crucial in preventing Lido from continuing to incentivize LPs under the false assumption that the volume was organically increasing.

Past Experience: Arbitrum

OpenBlock's engagement with the Arbitrum DAO has spanned three initiatives: STIP, Backfund, and LTIPP. The consistent renewals showcase OpenBlock's dedicated nature to an ecosystem, and the level of excellence we strive to achieve. This initiative also highlights OpenBlock's resilience in engaging with a diverse and vocal community, committing to bi-weekly updates with diligent insights. Our team actively participates in working group calls and offers invaluable guidance as trusted advisors in DAO deliberations. Lastly, we understand the paramount importance of high-integrity data when making pivotal decisions within DAOs, whether it is risk assessment or incentive optimization; our performance for Arbitrum is a testament to the high caliber we consistently uphold in our operations. The public, open-source dashboards are available here.

Duration & Proposed Budget

Implementation Fee ($40k per month):

- Full-time Data Scientist: $15k per month
- Full-time Quantitative Researcher: $15k per month
- Part-time Project Manager: $10k per month

OpenBlock Platform Fee ($30k per month)

- Includes access to exclusive OBL methodologies, models, and datasets (liquidity models, opportunity cost of capital, elasticity, competitive intelligence, incentive optimization, etc.). These models are being regularly updated by a team of leading data scientists and quantitative researchers.
- Offers a dependable data analytics and risk monitoring platform with unlimited seats.

Total: $420,000 for 6 months

Useful Links:

https://www.openblocklabs.com/

Arbitrum – 16 Dec 23

OpenBlock Labs STIP Data Reporting Update (12/15)

DAO Grant Programs

Biweekly Updates (STIP)

All of these insights are great. I especially love this one.

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Disclaimer:

This proposal is powered by Skywards. The Aave Chan Initiative is not directly affiliated with OpenBlock and did not receive compensation for creation this proposal.

Next Steps

1. If consensus is reached on this [TEMP CHECK], escalate this proposal to the Snapshot stage.
2. If the Snapshot outcome is YAE, this proposal will be escalated to ARFC stage
3. Publication of a standard ARFC, collect community & service providers feedback before escalating proposal to ARFC snapshot stage

4. If the ARFC snapshot outcome is YAE, publish an AIP vote for final confirmation and enforcement of the proposal

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