

The Aave Treasury Management Vision

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Abstract

The vision for the Aave treasury is to encourage innovation, accelerate growth, and prudently manage financial assets, while providing relevant and transparent financial reporting content. As long term believers in Aave, the protocol is to remain overweight \$AAVE capturing future growth upside, whilst hedging against the risks of adverse market conditions. Assets are to be deployed productively within the guidance of best asset management practices. Real-time financial metric performance tracking will provide transparency to the community and support decisions around how best the community deploys capital efficiently. Treasury management and financial reporting is in its early days and requires nuanced thinking within crypto, creating an opportunity for Aave to continue being a leader within the space.

Section 1. The Vision

Vision and Goals

The Aave Protocol (referred to herein as “Aave”) is primarily focused on innovation, growth, and developing relationships within the Ethereum DeFi ecosystem. The treasury can support experiment-driven innovation leading to future Aave growth while investing aToken reserve income to earn additional returns. The treasury can be utilised to increase the rate at which aTokens are being accumulated through a variety of productive strategies. The long term vision for the Protocol is for income to consistently exceed operational costs. This self-sustainability will allow Aave to be an active Ethereum and global citizen for years to come.

As a leading protocol, Aave intends to give back to the community through the AaveGrants DAO initiative and alike. The initiative will invest in early stage startup projects that have demonstrated the ability to add value to the ecosystem, attracting contributors to the Aave community and expanding Aave’s network across the DeFi ecosystem. The treasury intends to fund initiatives beyond the grants program that continue to create value for Aave and the broader ecosystem. Like in venture capital, these investments have asymmetric returns profiles capable of generating significant wealth for Aave’s treasury in years to come.

Aave’s treasury contains an overweight AAVE position that provides exposure to the future success and upside in the token price. However, the associated volatility and downside risks are not desirable. As such, Aave is exploring ways to reduce exposure to any meaningful deterioration in market conditions. Positioning the treasury to capture future upside whilst responsibly reducing downside risk is a key medium-term goal of the treasury.

In addition to holding a core position in AAVE and accumulating aTokens, Aave seeks to grow its metagovernance influence throughout the ecosystem to enhance integrations and unlock future opportunities for Aave. Metagovernance influence through alliances and integrations with other protocols/DAOs has the potential to bring asset diversification to the treasury and accelerate market adoption across the ecosystem. Strategic holdings, or joint strategic holdings, have the effect of bringing communities together through collaboration and innovation, becoming a positive-sum add on many levels.

Philosophy

The Aave Treasury ought to be utilised by the community to reflect the values and ambitions of the protocol. The protocol seeks growth and the accumulation of strategic assets, while continuing to be a leading DeFi citizen. Financial capital is to be deployed with holistic oversight, balancing a longer-term vision with consideration towards shorter-term capital planning/management needs. Within the portfolio, a select portion of Aave’s otherwise unproductive capital is to be invested to generate a return. Investing aTokens to earn additional returns is particularly appealing.

The vision for Aave is for aToken revenue to exceed all the expenses of the protocol. This would achieve our goal of inflows exceeding outflows, allowing Aave to fund growth initiatives, like liquidity mining, without reducing the core AAVE holding.

As Aave grows and expands, there becomes an increasing desire to monitor, assess and refine how capital is deployed. The best growth drivers are to be maximised and experiments that fail to gain traction are to be adjusted ensuring Aave is allocating capital and energy as efficiently as possible. Monitoring and improving capital efficiency over time shall utilise on-chain data and be monitored through statistical parameters, whether internally-facing like Return On Investment (ROI) or external-facing like peer-to-peer metrics, eg: Market Share. DeFi is a competitive landscape and understanding how effective initiatives are at driving growth will act to help shape future initiatives.

Governance

A Treasury Committee is to be created consisting of 5 community-elected individuals from within Aave and Llama. The committee will help shape how the treasury is managed, as well as ensuring there is open and transparent communication and alignment across the broader Aave ecosystem. The standard ARC and AIP process will be followed for all treasury

management-related actions. Any code developed for managing the parts of the treasury will need to go through a review cycle before being implemented. Snapshot is to be used as a tool to gauge community sentiment towards particular ideas. This means that the Treasury Committee will have no direct execution power; the committee's role would be purely advisory in nature and it is Llama's intent that the committee becomes a trusted first point of contact for the community in all matters related to treasury management.

Section 2. Asset Management

Introduction

The Aave treasury is to retain an overweight allocation to AAVE, accelerate growth through strategic investments, and hedge against adverse market conditions. In this section we will introduce the key concepts that influence the overall portfolio construction from an asset management perspective.

- Portfolio Construction
- Risk Management
- Liquidity Considerations
- Borrowing
- Hedging
- Productivity

Further details are to be provided within the Investment Policy Statement (IPS) publication.

Portfolio Construction

The Aave Treasury's composition is currently highly concentrated in AAVE governance tokens. A concentrated position subjects the portfolio to a higher level of risk. In order to mitigate the risks of a concentrated position, a variety of diversification tactics can be employed:

- Hedging to modify the risk profile
- Monetization strategies utilising AAVE as collateral and reinvesting
- Selling to diversify

Given the early-stage nature of Aave's business, it is recommended that Aave maintain their concentrated position and instead look at hedging and monetization strategies to redeploy capital without requiring a sale.

Capital that is generated from these strategies can be redeployed into the Protocol in order to accumulate a diversified portfolio of aTokens. These interest-bearing tokens serve two major purposes: 1) they allow Aave to generate a yield on the investment portfolio; and 2) they are an investment into the Protocol itself.

Since the AAVE token is highly correlated to the broader DeFi sector, which is a highly volatile sub-asset class of the crypto industry, the most immediate need within the portfolio construction framework is to reduce total portfolio volatility by allocating to stablecoins. This will theoretically increase the return relative to the standard deviation as exemplified by investment metrics such as the Sharpe ratio. In addition, allocating to tokens with lower correlations to AAVE will help smooth total volatility while allowing the Protocol to invest across the ecosystem.

The strategic asset allocation will be outlined in the Investment Policy Statement. The goal of this piece is to note the core functions of the portfolio construction framework:

- Offset the risk profile of the existing Aave position by reinvesting generated capital into a diversified portfolio of less correlated and less volatile assets.
- Maximize total return relative to standard deviation. This is done through diversification and deployment of capital into productive assets (e.g., aTokens).
- Utilize derivatives where applicable to tweak risk exposures to suit the needs of the Aave treasury (e.g., hedging either directly or indirectly the downside price movements of the AAVE token in order to preserve purchasing power during periods of market volatility).

Risk Management

All treasury management activities, including portfolio construction, use of derivatives/leverage, balance sheet modifications such as the deployment of debt, and more, should be guided by the risk management framework. The primary goal should

be to maximize the return on treasury assets for a given level of risk.

Risk considerations for the Aave treasury include, but are not limited to:

- Market Risk
- Liquidity Risk
- Smart Contract Risks
- Administrative Control Risks
- Technical Risks

The specific mechanisms and constraints used to balance these risks will be outlined in the IPS and the strategy proposal. For now, our goal is to highlight that risk management is an essential component of the treasury management process and will play a major role in determining suitability of investments and other capital structure decisions relating to the DAO's treasury function.

Liquidity Considerations

One of the core considerations of any potential treasury asset allocation decision is capital contingency. There is an ongoing requirement to fund operations and ensure that unexpected expenses can be funded as they arise. This necessitates a proper understanding of the operational expenses, which will be fleshed out in the financial reporting. This understanding can then be used to guide a working capital management program that ensures there is sufficient investment in assets that can be quickly liquidated without any significant adverse impact.

After ensuring operational needs are accounted for, illiquidity can be used to capture higher returns. Theoretically, and as part of the analysis when making an investment, illiquid assets (e.g. seed stage investments or strategic cross-DAO partnerships with defined lock-up terms) should capture a return premium relative to liquid assets. This is why so many endowments today have shifted their asset allocations from public equities into private equity alternatives. Aave should not fear illiquidity as long as the premium is justified for the level of risk and operational expenses are properly funded, including a buffer for unexpected spending requirements.

Our bias will remain for liquid assets considering DeFi's innovations in financial engineering to counteract illiquidity. However, an allocation to illiquid investments can still be suitable. We would recommend that illiquid investments be limited to a maximum of 50% of the treasury portfolio at any particular time, which is in line with the mean endowment allocation to illiquid alternatives. In practice, we would expect illiquidity to remain much lower than this maximum.

Borrowing

Enabling otherwise passive and unproductive assets to generate an income has the potential to significantly improve the value capture of Aave. By using passive assets as collateral and borrowing capital to be invested productively, otherwise unproductive assets become a source of income for Aave. Positive income generating allocations are highly accretive over any extended time horizon as returns compound.

Deploying capital to earn a return involves taking risks. These risks should be understood and evaluated. The details around how risk will be managed is to be presented within the IPS document. The vision is to develop profitable strategies with known risks that fit within a broader portfolio and holistic risk management framework.

For collateral to loan valuation risks, the positions can be automatically managed with DeFi Saver for Maker, or manually using the "Repay with collateral" feature on Aave to avoid liquidation.

Early Stage Investments

Given that Aave protocol is at its earlier stages, one of its top priorities is funding projects that help Aave grow and expand. AaveGrants DAO was set up to build a thriving ecosystem of Aave contributors and fund projects that grow Aave protocol. Aave DAO can take this to the next level by making early stage investments to help these projects scale.

Early stage investments can be sourced from the following areas:

- Aave Grants DAO recipients and applicants
- Gitcoin grants recipients and Gitcoin hackathon winners, especially teams participating in the Aave track
- ETHGlobal hackathon winners, especially teams participating in the Aave track
- Ecosystem development efforts in the broader Ethereum community

Thought needs to be put into the criteria, diligence, process, and structuring of these early stage investments. They will constitute a more illiquid and higher beta portion of the treasury allocation and therefore should be a small portion of the total

treasury size. These investments can serve as long-term bets that strategically benefit Aave protocol.

DAO Alliances and Integrations

Aave DAO can utilize token swaps to form alliances with other DAOs. Alliances can help Aave with integrating relevant products, improving TVL, and increasing stablecoin deposits. Alliances are also very useful for DAOs to help each other in times of need, such as during smart contract exploits. For example, Yearn has built trust with DAOs like Pickle and Rari Capital by helping them when they were exploited. Monetarily aligning DAOs via token swaps increases the possibilities for collaboration. Aave can serve as a mesh network for various protocols and DAOs. Unlike early stage investments, token swaps will typically be with more mature DAOs whose tokens have more liquidity.

Hedging

Key aspects of treasury management include retaining the value accrued, maintaining upside exposure, and mitigating the impact of material reductions in the spot market prices of key assets. In traditional finance there are many ways to mitigate downward market moves with the use of derivatives. Various types of derivatives, like options, offer skewed asymmetric returns profiles that enable small capital allocations to provide oversized asset price protection.

For example, a rolling long put option strategy can be an efficient way to hedge against downside risk. This strategy involves purchasing put contracts that provide the holder with the right to sell an asset at the price specified in the contract.

There is not yet any option market for AAVE. However, given the high correlation between AAVE and other assets like ETH during periods of high volatility, there exists the opportunity to explore indirect hedging strategies provided there is suitable on-chain liquidity. Other opportunities for hedging with VIX style volatility derivatives are likely to be available in the near future as well. As on-chain liquidity improves in protocols like CVI, and new coin specific VIX markets are developed, the assets held within the Aave treasury can be hedged more directly through volatility positions.

Productivity

The Aave Treasury intends to utilise a portion of its AAVE holding to further boost the liquidity of aTokens within the Ethereum ecosystem and provide a new source of income to the Reserve Factor (RF).

In broad terms, the approach is to deposit AAVE tokens from the RF into Aave or Maker, draw stable coins and deposit the stables to receive aTokens. Any loan would be sufficiently well capitalised to avoid liquidation and allow the Aave community to have exposure to any price action in the AAVE token. aTokens can then be used throughout DeFi to earn additional income.

There are many opportunities to earn additional income utilising aTokens across DeFi. Common yield strategies include providing liquidity on various decentralised exchanges to earn yield and receive incentives. Some Liquidity Provider (LP) tokens can serve as collateral, or can be staked to receive additional incentives, and even receive boosted returns through depositing the native governance token into a contract.

In addition to generating a more normalised return, there exists opportunities to build relationships, and/or use early stage protocols offering new use cases for aTokens or offer high levels of incentives. Such use cases have a higher risk profile, require in-depth research, and any allocation is to be sized to fit within a broader portfolio risk profile.

Given the size of the RF, there exists the potential to deploy several income-generating strategies to the benefit of the Aave community. Different strategies require different levels of oversight, offer different levels of returns, and contain differing amounts of risk. The vision for the productive allocation within Aave is diversifying across a range of income generating strategies and wherever possible supporting growth/integrations within the ecosystem.

Section 3. Financial Reporting/Performance

Introduction

Aave's goal is to provide relevant and transparent financial reporting/analysis to facilitate open and informed discussion within the community. Live financial tracking accessible via Dune and/or other platforms will enable performance to be measured in real time. This will provide visibility into what is happening on-chain in an easy to interpret manner and hopefully encourage community members to engage in discussion across the community. Aave intends to provide the following financial insights:

- Real Time Data Metrics
- Performance Analysis
- Financial Reporting
- Cash Flow Statement

- Balance Sheet
- Income Statement
- Cash Flow Statement
- Balance Sheet
- Income Statement
- Budgeting / Forecasting Expenses

Due to the nascency of financial reporting standards across DeFi, there is a great opportunity for Aave's financial statements to establish themselves as referential documents in the ecosystem; setting best practices that become ubiquitous. Llama understands the technical nature of financial statements, and we want to be prudent when sharing financial reporting with the community so as to not overwhelm them with new information.

Transparency

For governance of the Aave Treasury to be accessible to the community, there should be open access to data and key metrics. Open access enables any participant to view deep-dive data at any time, and/or be able to fork data sets to create their own analyses. Aave views data transparency as a necessary step to empower the community to make more informed decisions, and understand how various initiatives contribute to Aave's growth and its positioning among competitors.

Aave will continue to build a public [Dune Dashboard](#) that tracks protocol revenue and expenses over time. This will provide the community a real-time view into financial performance and treasury spending. The community could also monitor the Aave treasury's performance via token holdings and the correlations between what the treasury holds and other assets (i.e. ETH). High level protocol metrics can be shown on Dune, like valuation metrics (i.e. Price/Sales, Earnings per Token), and peer to peer comparison metrics (ie: TVL, Active Addresses). All these data points help to understand the impact of various growth initiatives and how the protocol is performing within the market.

The Aave community will benefit from having open insight into data that provides context for more widely understood product decisions and business model proposals. This includes tracking usage metrics like number of active addresses, transactions by action (i.e. lend, borrow), token affinity with other DeFi apps, and other token holdings.

Financial Reporting

The objective of financial reporting is to provide financial information that is useful in decision-making for present and potential stakeholders. The information in these statements should also serve as a resource in making effective governance decisions. It accomplishes this by helping the community and other stakeholders assess the treasury's prospects for future net cash flows, which provide payments for treasury operations and also returns to stakeholders.

In the context of Aave, the stakeholders are the ones who make decisions in lending or borrowing from the protocol. The community also includes some stakeholders who play an important role in the future of the protocol through creation and voting on AIPs. Aave's financial reporting will provide transparency for these stakeholders and the financial information they contain are an important tool for making better-informed decisions.

In traditional accounting, we measure the decision-usefulness of financial reporting in two ways: relevance and faithful representation. Relevance refers to whether the financial reports include line items that are material, comparable between periods, and verifiable. Faithful representation refers to the financial information being complete, free from error, prepared in a timely manner, and understandable. Our approach to Aave's financial reporting will take these fundamental qualities of decision-useful financials into consideration.

For the relevance quality, we will be using information that is verifiable through Etherscan. For instance, we will be measuring the aTokens that are minted in the Aave treasury as verified on Etherscan, and use publicly available information on interest rates of aTokens in our calculation of interest revenue earned by period.

For the faithful representation quality, we will ensure that we report using transactions from all Aave treasury wallets for v1, v2 and Polygon. While crypto accounting softwares are primitive today, we will be using them to prepare financials in a timely manner, typically 1-2 weeks after month-end for the previous month.

The financial report will consist of multiple financial statements: the income statement, balance sheet, and cash flow statement. The footnotes to these financials are also an integral part of financial reporting and will be included to explain any major transactions that occurred during the periods covered.

Financial reporting will bring better transparency to the aTokens currently held in treasury and their performance over time. Our goal is that this transparency enables insight into Aave's potential to generate revenue as well as bringing awareness to the importance of financial reporting to all treasury management teams.

Forecasting Expenses

The long-term vision is for all of Aave's expenses to be funded in perpetuity from income. For now, most of the expenses are paid in AAVE (Staking Rewards, Liquidity minings, grants, etc.) and this is sustainable for a period of time. However, longer term using aTokens (stable coins) to pay expenses allows the community to retain exposure to the future upside in AAVE token price.

Managing the progression from using AAVE to aTokens for paying expenses shall require budgeting for future costs, forecasting future revenue and considering other potential use cases for aTokens. Ultimately, the vision is to have sufficient aToken inflows to accommodate all use cases.

Conclusion

The prior sections outline Aave's intent to utilise the treasury to the benefit of growing the protocol, advancing the ecosystem and retaining the value generated for the benefit of the community. Investments are to be managed within the context of a broader portfolio construction and risk management framework with real time financial performance reporting. The community is to receive periodic financial reports that are to be relevant and transparent. By following the course of action described above, Aave will move towards a more sophisticated and structured treasury management and financial reporting standard.