Summary

The Arbitrum DAO is at a pivotal moment where strategic adjustments can significantly enhance long-term financial sustainability. By addressing areas such as rising expenditures, diversifying income streams, managing ARB sell pressure, and optimizing the treasury's risk exposure, the DAO can fortify its financial health. These are common challenges faced by many DAOs and, which with the right actions, can be overcome.

With this context in mind, Avantgarde proposes a holistic treasury management process designed to enhance the DAO's long-term sustainability. Our plan focuses on the strategic diversification of the treasury to generate yield on treasury assets while reducing risk. By implementing this structured approach, we can effectively manage the sell pressure on ARB. We believe it is important to act now to ensure a more stable future for the DAO making it more resilient in future downturns.

We're very supportive of the recent proposal by Karpatkey and Gauntlet and would like to put ourselves forward as an option alongside them. We feel that there are strong benefits to manager diversification for several reasons;

- 1. Diversification of infrastructure risk
- 2. Variety of approaches & strategies to provide more diversified returns across different market cycles
- 3. A more heterogeneous set of strategies will facilitate the spread of liquidity across the ecosystem
- 4. Provides the DAO Oversight Committee with more data points to assess across multiple managers
- 5. Provides the DAO Oversight Committee with flexibility in the event a manager is not performing (can easily move allocation to another manager in the program)
- 6. Removing a single point of failure is in line with Arbitrum's ethos towards decentralisation

Motivation

Treasury Volatility & Diversification

Arbitrum DAO currently holds 98% of its treasury in its native token, a heavily concentrated portfolio. Though this is similar to many other DAOs in the space, it can be problematic from a treasury management perspective for a number of reasons. Firstly, holding an entire portfolio in a single asset exposes the treasury to significant risk of failure - even the most optimally run organisations (whether traditional or decentralised) can be impacted by black swan events outside of its control - diversification is a hedge against one's inability to perfectly predict the future. Secondly, the risk is amplified when that asset is the project's own token, since its price is linked to the fundamental performance of the project - this constrains the ability of the treasury to act as a counter cyclical buffer when the project is most in need of liquidity. Thirdly, crypto is volatile, far more so than other prices in the economy. This creates a mismatch between a DAOs assets and its liabilities, which include the cash outflows for the current and future projects it intends to fund through its treasury. Though grant payments might be denominated in crypto, human labour is still priced against its own costs, which are largely still denominated in fiat - even during the heightened economic volatility of recent years, price changes in the real economy still pale in comparison to the price movements of most tokens.

Goals

The goal as treasury manager is to improve long term sustainability of the Arbitrum DAO, achieved through a number of sub objectives:

- Allocate to strategies that generate an alternative revenue stream to buffer against poor market conditions
- Initiatives to improve the liquidity of the DAO's native token
- Managing any price impact of the ARB token from treasury management operations
- (Future direction subject to DAO coordination) Utilise treasury management strategies that bring the risk of the DAO treasury in line with financial objectives

Introduction to Avantgarde

Avantgarde is a crypto native asset management, advisory and research firm, specialising in asset liability management, R&D, special situations, risk monitoring and on-chain diversification strategies. Avantgarde has conducted work for leading protocols including Uniswap, The Graph, Arbitrum, Nexus Mutual, Paraswap, Enzyme and others. DAOs leverage Avantgarde's combined expertise in protocol development and asset management for developing strategies to improve treasury sustainability.

There are many approaches to DAO treasury management. Our philosophy is to take a longer term and data driven approach (where appropriate), with a preference for simplicity over complexity, and to focus on diversification across the treasury management process.

Avantgarde has been involved with Arbitrum's Treasury & Sustainability Working Group since the early stages, including the production of a <u>study</u> focusing on how traditional asset classes, accessed via real world assets, can reduce risk within DAO treasuries which played a role in the evolution of the STEP program to where it is today

Proposed Strategy

Risk Reduction

Although the realised volatility of ARB has been lower recently compared to previous years, it remains at nearly double that of BTC and ETH. Whilst it is worth acknowledging volatility is far from an exhaustive measure of risk, it is useful in a treasury management context since higher volatility reduces the certainty of future grants, diminishing visibility and making longer term financial planning more difficult.

One pillar of the strategy will look to de-risk the treasury through allocations into lower volatility assets, such as stablecoins and ETH, whilst making considerations for ARB liquidity to regulate sell pressure.

Revenue Generation

A by-product of thoughtful diversification of the treasury is the potential for generating revenues for the DAO. In addition to reducing treasury volatility, allocations in stablecoins and ETH can be put to work in DeFi to generate yield that will support DAO sustainability. A key focus of the DeFi strategies considered will be on risk management and earning a risk-adjusted return consistent with the cash flow needs of the DAO. On-chain rates in DeFi vary by collateral, across protocols, and through time (block by block). To estimate an aggregate measure for yields in DeFi, On-chain Stablecoin Yield looks at a TVL weighted average APR of the most prominent stablecoin lending protocols. Rates are currently above ~7% for the largest stablecoins on the most well known and highest capacity lending pools.

A separate source of organic on-chain yield is staking rewards on ETH. Though execution layer rewards are more stochastic, consensus layer rewards are far more stable and dependent on the number of validators staking on the network. Current consensus layer APR is around 3%, with execution layer rewards averaging just under 1%.

In practice there are strategies which can improve on the risk adjusted returns of these simple examples, however they provide a useful baseline to illustrate the potential revenue that can be generated for the DAO.

Avantgarde will implement a range of treasury strategies via a pre-approved protocol universe and agreed risk parameters (for example via a DAO Oversight Committee) which can be enshrined as policies within treasury management infrastructure tooling (as covered in the following section). Beyond the primary objectives of reducing treasury volatility and generating diversified revenue streams through yield, we will also look to allocate to projects that would foster Arbitrum ecosystem growth, where liquidity and capacity would allow. In addition, we will also consider strategies that can earn yield for the DAO without the need to sell ARB.

Infrastructure & Security

Of crucial importance for any treasury management operation is a trust minimised infrastructure setup where the security of the DAO's assets is the first priority. Avantgarde has the flexibility to work with multiple treasury management infrastructure providers and we are open to community feedback and preferences to ensure the DAO has peace of mind regarding safety of treasury funds.

Where there are no specific preferences from the community, Avantgarde have used Enzyme as the infrastructure of choice because its adaptable and time-tested architecture enables DAOs to effortlessly manage permissions, both granting and revoking them, while maintaining non-custodial control of the funds at all times.

Roles and recommended configuration

The setup involves three distinct and synergic roles if using Enzyme:

- Vault owner (proposed: Arbitrum DAO or multisig address): The vault owner is the address that has full ownership of
 the vault settings, permissions, restrictions, etc. Vault owner retains exclusive authority over assets and any future
 changes if required.
- Depositor (proposed: Arbitrum DAO or multisig address): The depositor is the address that is whitelisted for depositing and withdrawing funds from the vault. When a deposit is made, the depositor's wallet receives and holds vault shares (ERC-20 tokens).
- Delegated Asset Manager (proposed: Avantgarde Finance): The delegated manager is the address chosen by the

vault owner to execute specific asset management strategies. Within the boundaries defined by the vault owner, the delegated manager can carry out predefined operations. This delegation framework combines trustlessness (as rules are enforced by code) with higher efficiency and speed (allowing transactions to be executed promptly). Examples of rules set by vault owners include permitted assets, allowed protocols and strategies, maximum slippage tolerance, and authorised trading venues. Importantly, the vault owner can revoke the delegated permission anytime.

Key considerations regarding Enzyme's security

Security is a paramount concern for Enzyme, and several key factors contribute to this commitment:

- · Live on Mainnet for more than five years, demonstrating its robustness and reliability.
- Every integration undergoes a rigorous <u>audit</u> process conducted by Chain Security.
- A substantial bug bounty program on Immunefi.
- Opt-in Protocol upgrades

Performance Monitoring

Performance measurement in treasury management is multi-faceted. We believe performance should be defined based on the specific financial objectives the program is looking to achieve. For Arbitrum DAO this is centered around:

- Risk reduction how has the risk profile of the portfolio evolved over the reporting period, across measures such as volatility, smart contract risk exposure, and tracking error of stablecoin positions.
- Revenue generation what level of income has the portfolio been able to generate in both absolute terms and relative
 to yields across the market, in the context of the stated risk profile of the mandate.
- Portfolio composition how has the diversification of the portfolio evolved over the reporting period, with reference to the long term diversification objectives of the DAO.

An important emphasis is that measurement of risk is as important as levels of return for the DAO to ensure that a manager is remaining consistent with their stated mandate.

We recognise that the appropriate breadth & cadence of reporting will evolve based on market conditions and events. Transparency is at the core of Avantgarde's philosophy, and we will be committed to regular dialogue with relevant DAO community members to ensure the highest standards of accountability are maintained.

Fees

0.75% on AUM (all-in fee) for a mandate <\$50m

0.45% on AUM (all-in fee) for a mandate >\$50m

Contribution to the Arbitrum ecosystem

As part of our DAO advisory work, Avantgarde is proud to be working closely with Enzyme DAO to support them with their Arbitrum deployment and securing other biz-dev partners for launch. This effort should help increase TVL and transactions on the Arbitrum network and we're excited to share more on this in coming weeks.

Appendix - Manager Diversification

A key driver for this proposal is to improve long term sustainability through diversification. There are many aspects of diversification that can improve the robustness of the DAO's treasury, not just at the asset level, but also at the treasury manager level and infrastructure level. As stated in the summary, although this is a proposal for Avantgarde to be considered as a treasury manager for the Arbitrum DAO, we are true believers in the benefits of diversification and we would urge the community to also consider allocations to multiple treasury managers for the following reasons:

- The Arbitrum ecosystem places great importance on decentralisation and we believe this core tenet should also be applied in the context of treasury management.
- Diversifying across multiple managers, with different approaches and infrastructure setups, will reduce risk and ensure decentralisation of DAO treasury management decisions going forward.
- It will also provide for more fluid expansion of ecosystem liquidity, with multiple allocators spreading capital over a

more heterogeneous set of projects than would be the case with one single service provider.

- Manager diversification is established as best practice for institutional capital allocators and Arbitrum's treasury should
 aspire to have robust processes put in place from the outset in order to facilitate future growth and development within
 the DAO.
- A multi-manager set up is in line with the proposed DAO Oversight Committee, who will have more data points to compare & contrast, and more levers to pull in the event any one manager is underperforming in on their KPIs.