We are happy to share a study for the Arbitrum community on the impact of portfolio volatility on DAO treasuries.

Following discussions with the <u>Treasury and Sustainability Working Group</u>, our study focuses on the risk reduction properties of traditional asset classes such as stocks and bonds for a DAO treasury, and highlights the potential impact on portfolio level risk/reward of broadening an investment universe with less correlated assets. In addition, we also provide examples of how allocations could have affected the historical risk profile of a DAO treasury, and also the tradeoffs of using stablecoins as a risk reduction tool, including the potential impact of capacity constraints for large DAO treasuries looking to earn yield on their stables in DeFi.

The data shared in our study includes:

- 1. Levels of portfolio concentration within the DAO treasury landscape
- 2. Statistical relationships between ARB, BTC, and ETH
- 3. Historical volatility of traditional asset classes compared with crypto
- 4. How allocations have impacted historical losses
- 5. The cross-section of drawdowns experienced across the DAO landscape post FTX
- 6. The relationship between time horizon and expected maximum drawdown
- 7. Long term historical evidence for returns in traditional asset classes
- 8. Correlations between traditional asset classes and crypto
- 9. Potential tail risks when using stablecoins as a risk-free proxy
- 10. Capacity constraints for earning yield on stablecoins in DeFi
- 11. Optimal portfolios including and excluding traditional asset classes
- 12. How constraints around portfolio concentration can limit diversification benefits

We hope that by collating and sharing this publicly available data, we can help to demystify and to highlight the ways these important factors relate to the improvement of long term treasury sustainability.

Arbitrum Treasury and Sustainability Research - Demystifying DAO Treasury Risk Reduction