

As part of Allez Labs' engagement with the Arbitrum Grants Program, we are posting an introduction to, and methodology for the Arbitrum DeFi Dollar Rates.

Overview

Here we introduce two key metrics to the Arbitrum ecosystem: the Arbitrum DeFi Dollar Borrow Rate (ADDBR) and the Arbitrum DeFi Dollar Supply Rate (ADDSR). These indexes are designed to provide a consolidated view of stablecoin lending and borrowing activities across the Arbitrum network.

In the rapidly evolving world of decentralized finance (DeFi), understanding the true cost of dollar denominated borrowing and the potential returns on lending can be challenging, especially when considering the many protocols and stablecoins in use. The Arbitrum DeFi Dollar Rates aim to address this challenge by aggregating data from various major lending platforms and stablecoins, offering users a single, reliable reference point for the Arbitrum stablecoin ecosystem.

By weighing rates by the outstanding supply and borrow in each protocol and for each stablecoin, the DDBR and SR provide a more accurate representation of the overall market conditions than simple point in time estimates for single lending market - stablecoin pairs. This approach ensures that larger, more influential protocols and widely-used stablecoins have a proportionate impact on the final rates.

DeFi Dollar Purpose & Use Cases

The DeFi Dollar Rates will offer comprehensive insights into on-chain borrow and supply rates, as well as active supply and borrows for USD stablecoins. This information aims to drive informed decision-making for lenders, borrowers, and protocols within the Arbitrum ecosystem.

The Arbitrum DeFi Dollar rates serve multiple purposes within the DeFi ecosystem:

1. Market Insight

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The Arbitrum DeFi Dollar dashboard offers a user-friendly interface for individuals, enabling them to explore and understand the stablecoin ecosystem in a simplified manner. This can help lower barriers to entry, making DeFi more accessible to a broader audience.

The DDBR and SR offer a quick, at-a-glance view of the current state of stablecoin lending and borrowing on Arbitrum. This can help users understand overall market trends and conditions.

Researchers and analysts can use the historical data of these rates to study trends, correlations with other economic factors, and the overall health of the Arbitrum DeFi ecosystem.

1. Benchmark for Protocols & DAOs

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Protocols can use the DeFi Dollar indexes to monitor market conditions, analyze competitive dynamics, and design more attractive products. If a protocol's rates significantly deviate from the ADDBR or SR, it might indicate a need to adjust their parameters or incentives.

For DAOs and governance communities managing stablecoin-related protocols, these indexes can provide key metrics to guide decisions on interest rates, liquidity incentives, and reserve management. The ability to track market-wide borrowing and supply trends helps governance participants craft proposals that align with current market conditions.

1. User Decision-Making

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- The Arbitrum DDSR provides a clear picture of the current and historical supply rates across major lending platforms. Lenders can use the DDSR to gauge whether the rates they're earning are competitive with the broader market and identify optimal strategies for maximizing returns within the Arbitrum network.
- The Arbitrum DDBR allows borrowers to assess the cost of borrowing stablecoins across various platforms, helping them determine the most cost-effective options. By tracking historical borrowing rates, users can also anticipate rate trends and better manage their borrowing strategies
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- Risk Assessment

: Significant changes in the DDBR or DDSR over time can indicate shifting market conditions or risk levels in the Arbitrum ecosystem.

1. Cross-Chain Comparison

: While focused on Arbitrum, these rates can be compared with similar metrics on other chains to assess Arbitrum's competitiveness in the broader DeFi landscape.

1. Reflexive Products

: In the future, these rates could potentially serve as the basis for automated risk management via yield oracles based interest models as well as derivative products, such as interest rate swaps or futures contracts based on the Arbitrum DeFi markets.

By providing these standardized, aggregate measures, the Arbitrum DeFi Dollar rates aim to increase transparency, facilitate better decision-making, and ultimately contribute to the growth and efficiency of the Arbitrum DeFi ecosystem.

Methodology

The Arbitrum DeFi Dollar Rates (ADDBR & ADDSR) aggregate the borrowing cost and supply earnings in lending protocols and savings primitives across dollar-pegged stablecoins and protocols.

Arbitrum DeFi Dollar Borrow Rate (ADDBR)

The ADDBR is calculated as the debt-weighted average borrow rate of active stablecoin borrowing positions across included protocols and stablecoins:

$$\text{ADDBR} = \frac{\sum_{i,j} \text{BR}_{i,j} * \text{TB}_{i,j}}{\sum_{i,j} \text{TB}_{i,j}}$$

Where BR = Borrow Rate, TB = Total Borrowed, i = stablecoin, j = protocol

Arbitrum DeFi Dollar Supply Rate (ADDSR)

The ADDSR is calculated as the supply-weighted average supply rate of stablecoins in lending protocols and savings primitives.

$$\text{ADDSR} = \frac{\sum_{i,j} \text{SR}_{i,j} * \text{TS}_{i,j}}{\sum_{i,j} \text{TS}_{i,j}}$$

Where SR = Supply Rate, TS = Total Supplied, i = stablecoin, j = protocol

Note:

In this first iteration, the DeFi Dollar Rates only include the organic yield of the tokens, exclusive of incentives. Future iterations may incorporate incentives, pending development of appropriate methodologies for various distribution methods.

Inclusion Criteria

Protocols

Stablecoin lending protocols with supplies surpassing \$50M on Arbitrum and with stablecoin borrows exceeding \$5M are included. Current qualifying protocols:

1. Aave
2. Compound
3. Radiant
4. Dolomite
5. Silo

6. Fluid

As additional protocols mature and grow, and as the Arbitrum DeFi landscape changes, we expect to update this criteria.

Stablecoins

Stablecoins meeting both of the following criteria are included:

- Market capitalization exceeding \$5M on Arbitrum
- Maintained within +/- 2% of its peg for the past 3 months.

Current stablecoins satisfying these criteria:

1. USDT
2. USDC
3. DAI
4. FRAX
5. MIM
6. USD+
7. USX
8. USDT+

New entrants to the Arbitrum Ecosystem as well as GHO, OD, and others may be included in future updates.

Note:

Stablecoins that depeg or protocol's which TVL drops below the inclusion threshold for over a month may be excluded from the indexes.

Methodology Review and Updates

This methodology will be updated quarterly to ensure it best reflects the stablecoin activity on Arbitrum. We will collect user feedback and requests to be considered.

Data Collection

On-chain data will be sourced from each protocol's contracts then combined and aggregated via SQL transformations. Additionally, a lite and easy to fork version will be constructed inside of Dune Analytics. The code as well as comprehensive instructions to replicate the DeFi Dollar pipelines will be open sourced in a upcoming release as part of our grant engagement.

Conclusion & Future Enhancements

The Arbitrum DDBR and DDSR indexes will be key resources for DeFi participants seeking data-driven insights into stablecoin dynamics on the Arbitrum network. By aggregating critical data points, this initiative supports improved transparency, informed decision-making, and broader adoption of Arbitrum-based DeFi opportunities.

While this initial methodology focuses on organic yields, we aim to expand coverage by:

- Including incentive-adjusted yields.
- Expanding the list of protocols and stablecoins as Arbitrum DeFi markets evolve.
- Providing deeper insights into stablecoin utilization, peg stability, and yield dynamics.
- Expanding to other liquidity pools.

We will post an update on this forum when code to produce the Arbitrum DeFi Dollar Rates are made public, and when the relevant websites / dashboards are live.

Disclaimers

Allez Labs is working with the Arbitrum Grants Program to develop the Arbitrum DeFi Dollar Rate and produce a dashboard to showcasing these metrics as well as other Arbitrum Stablecoin metrics.

The Arbitrum DeFi Dollar Rates are provided for informational purposes only and should not be considered financial advice. Users should conduct their own research before making any financial decisions.

Contact Information

For questions or feedback regarding this methodology, please contact hey@allez.xyz