Arbitrum Ecosystem Report Q1 2023

Overview

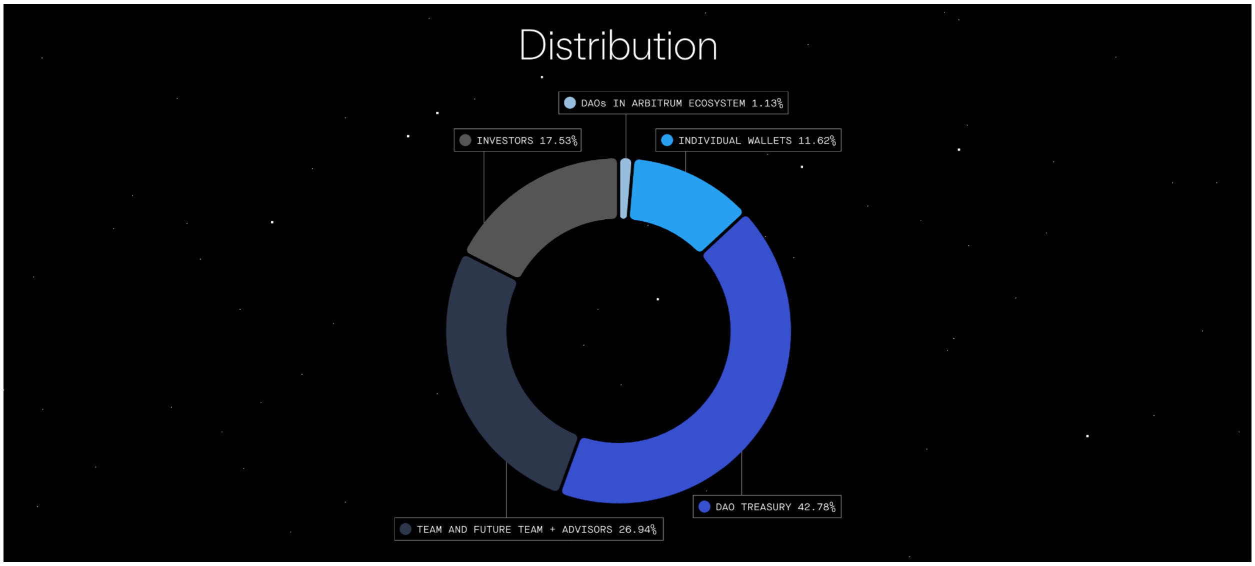
Optimistic Rollups

Arbitrum One is an Optimistic Rollup and one of the many scaling solutions for the Ethereum blockchain. Optimistic rollups assume that the sequencer(s) are not malicious and that transactions are posted correctly. To ensure that transactions are valid, anyone can submit a fraud proof if they identify any invalid transactions within a week. The dispute is then narrowed down to a single line of instruction and executed on the L1 chain to verify correctness. The fraudulent node would have its stake slashed, with its portion going to the winner of the challenge. The process of presenting evidence of an incorrect state transition is called fraud proof. This is the basis of how an Optimistic Rollup like Arbitrum One works, reducing the workload on the main L1 chain, as not all the transactions need to be re-executed and incentivizing nodes to be well-behaved.

Check out Nansen's previous report on Arbitrum and other scaling solutions for Ethereum here.

Key Developments: Q1 2023

ARB Airdrop



Source: [Arbitrum Foundation]

- On Mar 16, the Arbitrum team announced the highly anticipated ARB token airdrop through a teaser video titled "Operation Wen", utilizing these tokens for decentralizing governance and rewarding users of the protocol.
- The majority of the supply (56%) would be community-owned, with 12.75% of the initial distribution being airdropped on Mar 23.
- Offchain Labs partnered with Nansen to design the eligibility criteria for the airdrop utilizing on-chain activity to encompass a wide range of users and reserve tokens for future DAO grants.
- The airdrop included several Arbitrum projects with DAO treasuries to further engage with smaller sub-communities within the Arbitrum ecosystem.
- The tokens allocated to investors and team members are locked up for 4 years vesting with a one-year cliff.
- Check out our in-depth "All for One and One for All" report on how we designed the distribution model and used on-chain metrics to ensure a fair allocation.

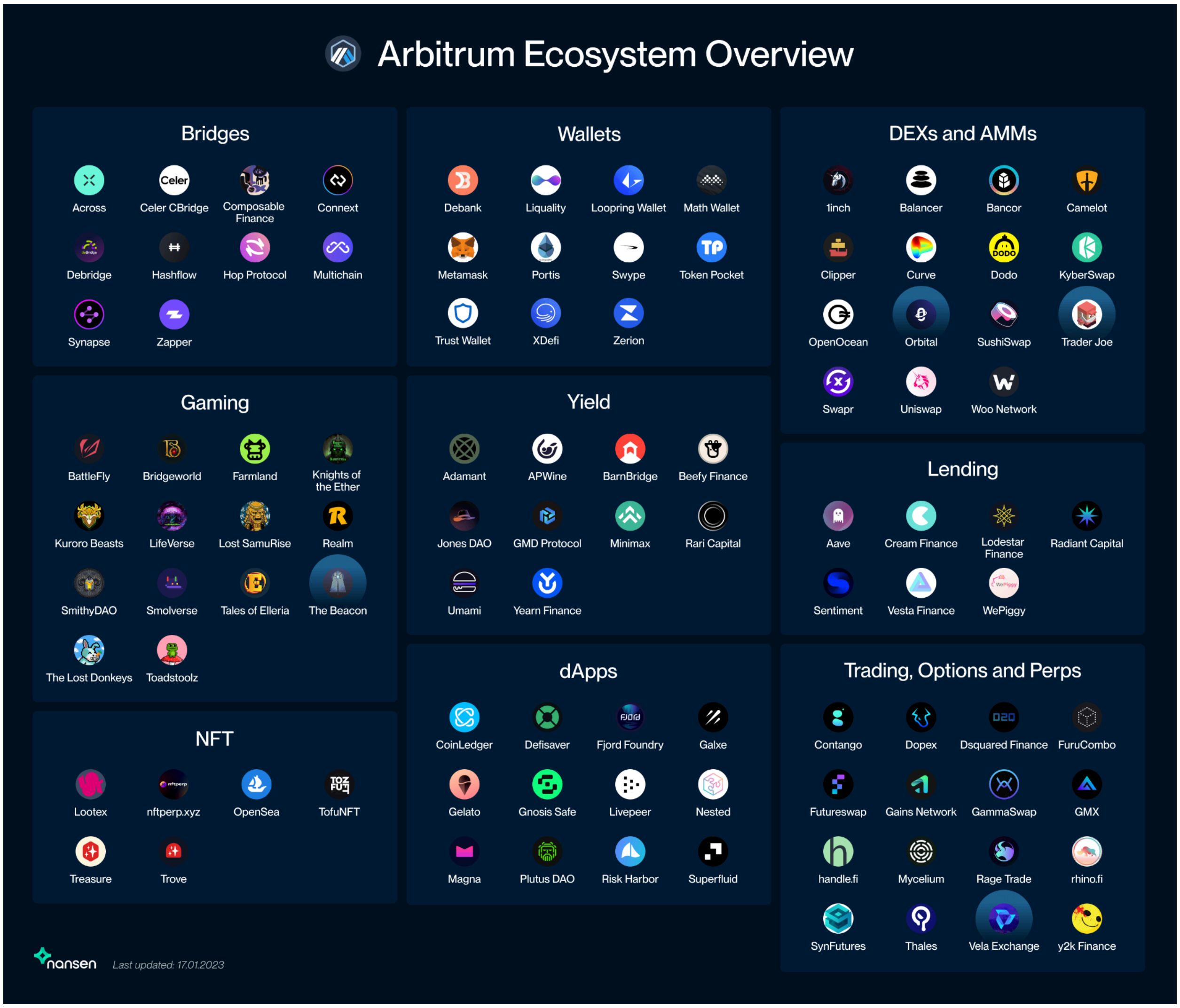
Arbitrum Orbit

- Arbitrum Orbit was simultaneously announced together with the ARB airdrop, allowing developers to launch their own Layer 3 (L3) on top of the Arbitrum ecosystem.
- This would increase the chain's throughput significantly while leveraging Arbitrum's security.
- Utilizing the same framework would also allow dApps to be compatible with the broader ecosystem and provide users with a smoother experience.
- While the aforementioned L3s could be deployed in a permissionless manner, developers would have to submit a DAO proposal for a license to launch their own L2 chain utilizing Arbitrum technology.

Arbitrum Stylus

- Stylus is a general-purpose programming environment and WASM virtual machine that would be integrated into Arbitrum One and Arbitrum Nova.
- It would allow developers to deploy programs written in popular programming languages such as C, C++ and Rust.
- This would decouple the need for developers to know Solidity to continue building on Arbitrum and facilitate the transition to Web3.
- Stylus would also simplify developing powerful programs and custom precompiles, special smart contracts that excel at executing specific tasks.

Ecosystem



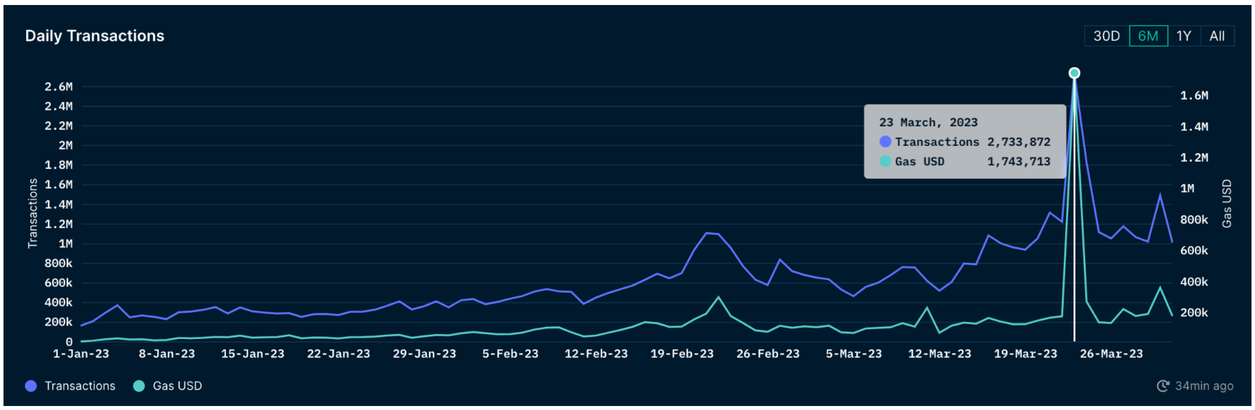
Arbitrum One hosts a dynamic ecosystem of dApps, which can be viewed on the [Arbitrum One Portal] directory. Besides the ARB token airdrop, there have been many new additions to the Arbitrum ecosystem including new token launches on [Camelot], migration of [Pirate Nation] by Proof of Play and Radiant v2.

Radiant v2

- Radiant Capital, an omnichain lending protocol, announced Radiant v2 which aims to develop a more synergistic relationship between lenders/borrowers with the protocol as well as stricter eligibility criteria for RDNT emissions.
- In partnership with LayerZero and Stargate, the Radiant team has transitioned the current ERC-20 RDNT token to the LayerZero OFT (Omnichain Fungible Token) format, facilitating cross-chain fee sharing and interoperability across chains.
- Additionally, Radiant introduced Dynamic Liquidity Provisioning (dLP) in a Radiant DAO proposal, RFP-4.
- The proposal empowered users who contribute back to the protocol via emissions while normal users would only receive the current market rate of yield, incentivizing users to stake and reward them accordingly.
- With potentially higher yields from emissions, users would be incentivized to deposit more and maximize their deposits. This will create buying pressure if dLP prices fall to maintain the minimum deposit threshold to qualify for emissions.

Nansen On-chain Data

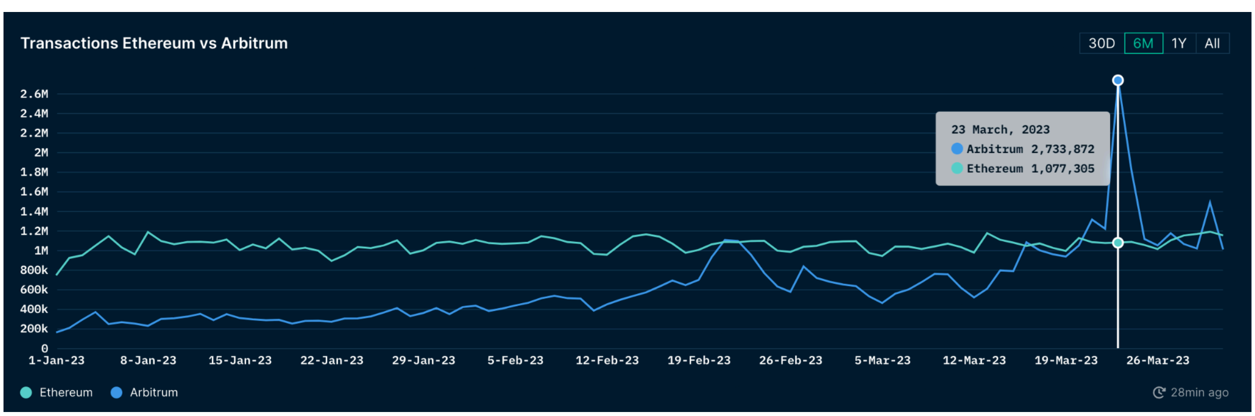
Daily Transactions



Source: [*Nansen*]()

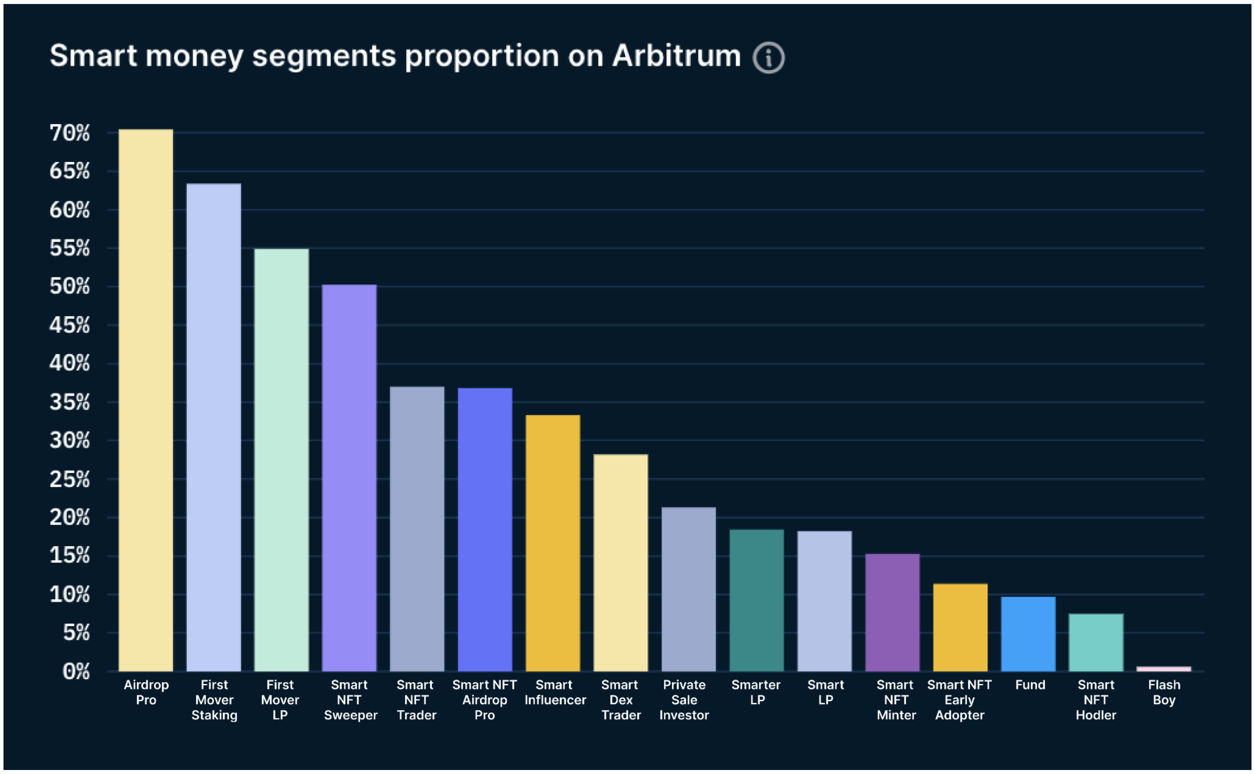
Daily transactions hovered around 300k at the start of the quarter and peaked at ~2.7mfollowing the ARB token airdrop on Mar 23. This overshadowed the market volatility when USDC experienced a temporary de-peg on Mar 11. Gas used on-chain followed a similar pattern as transaction count and spiked on the same day as the airdrop.

Daily Transactions (vs Ethereum)



While Arbitrum experienced a surge in the number of transactions, Ethereum's transaction count stayed relatively flat at ~1m daily.

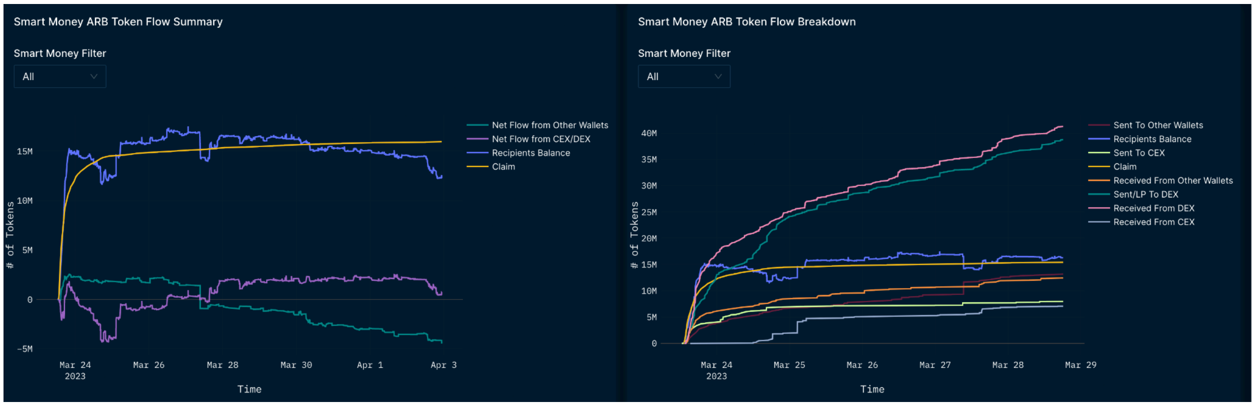
Smart Money Segments on Arbitrum



Source: [Nansen]

After months of speculation and the announcement of the ARB airdrop, various Smart Money addresses demonstrated their expertise in keeping up with the narrative and getting rewarded in the process, notably the “Airdrop Pro” segment.

Following the airdrop, Nansen added the following labels - "Max ARB Airdrop Recipient" and "#k ARB Airdrop Recipient", which could help users to further analyze upcoming narratives. One such wallet (0x274...) is labeled “Airdrop Pro” and managed to earn the maximum airdrop.



Source: [Nansen Query]

Check out our custom Arbitrum Airdrop [dashboard] to see what Smart Money has done since the airdrop.

Top Entities by Users and Transactions

Arbitrum Users by Entity

Entity	Q1	All time
Arbitrum	864,515	1,126,029
USDC	550,513	1,083,321
Uniswap	377,265	788,501
Tether	343,765	641,108
BitKeep	296,517	297,487
SushiSwap	275,736	641,990
Radiant Capital	225,159	500,514

Arbitrum Transactions by Entity

Entity	Q1	All time
Uniswap	3,108,155	8,737,860
SushiSwap	2,701,013	7,096,715
Gains Network	2,692,429	2,985,819
Arbitrum	2,550,502	4,178,639
USDC	2,019,116	5,054,238
Vela Exchange	1,808,247	1,965,204
GMX	1,724,389	5,889,037

Source: [*Nansen*] *(excluding entities with "Unknown" labels)*

With the help of Nansen labels, the top entities by transactions and users are Stablecoins and DEXs (Uniswap, Sushiswap). This could be attributed to trading opportunities when the ARB token was launched, as well as the volatility that was caused by the USDC de-peg.

Closing Thoughts

Amid market volatility, the launch of the ARB token was generally considered a success and was received well by the community. This is a key step towards the goal of decentralizing the network and rewarding users who participated and contributed to the ecosystem. Additionally, the Arbitrum team's dedication has been evident as new infrastructure improvements, such as Stylus, were deployed. Even after the confirmation and execution of the airdrop, the Arbitrum ecosystem remains one of the most active and innovative in the crypto ecosystem. It will be exciting to see how Arbitrum continues to progress in Q2.