



Q3 2022 Financial Report July - September

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What is Aave?

"Aave is an open source and non-custodial liquidity protocol for earning interest on deposits and borrowing assets"



Q3 Insights and Key Financial Measures



General Market Conditions in Q3

Q3 presented challenging market conditions for Aave and the ecosystem as a whole. The fallout from UST has been felt across the market. Bear market conditions and significant repayments of loans (such as those from Celsius) at the start of the quarter resulted in lower utilization rates on mainnet throughout the quarter.

Revenue has trended lower in Q3 vs Q2, down 27.9%. Q2 was a bumper quarter with the launch of incentives on the avalanche market, which had strong initial adoption.

Q3 saw a significant Ethereum development with the Merge to the Beacon Chain. This had a number of knock-on effects, which in the run up to the Merge, resulted in a pause in ETH borrowing causing a drop in revenue. However the markets in general have grown from Q2 with DeFi growing 2.9% since the end of July showing some positive signs of recovery even during turbulent times in traditional financial markets.

We have reviewed Q3 actuals and prorated revenue figures for a 12 month period. Anticipated annual revenues in current market conditions is \$18.3m. It should be noted that there are a number of outliers in the data, for example the Optimism market is currently incentivized, and as with other markets such as Avalanche and Polygon, once incentives are reduced or turned off, TVL tends to leave the market.

Throughout a turbulent period monthly revenues have trended lower consistent with lower TVL and utilization. The main differentiator for Q3 vs Q2 is high third party costs in relation to Aave companies V3 retro payment.

Aave Pools Overview

Total Deposits (All Pools)

\$8.4B

Stable rate loans (All Pools)

\$70.7M

Variable rate loans (All Pools)

\$3.0B

Total Borrowed (All Pools)

\$3.1B

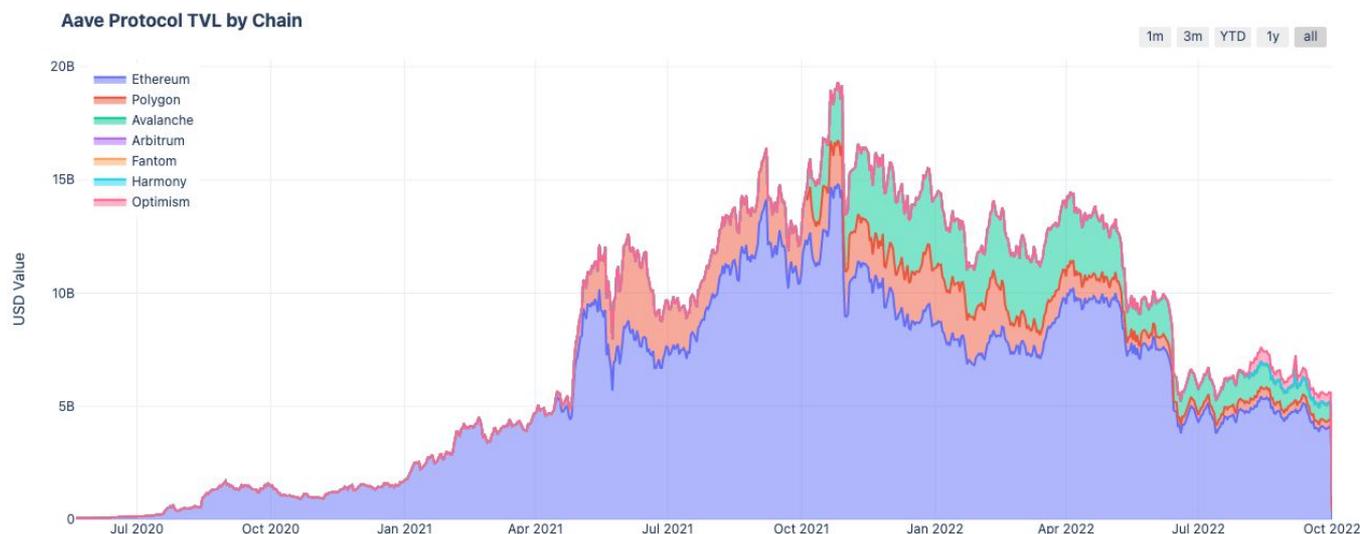
Aave's market exposure across multiple chains has grown significantly in recent times. There are currently 12 pools spanning 6 different networks within the Aave ecosystem. Within the last 6 months, Aave V3 was launched on Avalanche, Arbitrum, Fantom, Harmony, Optimism, and Polygon, and there remains strong interest from various other networks for future deployments. Further, the much anticipated V2 to V3 upgrade on Ethereum is expected to occur soon.

At the turn of the new year, combined TVL in Avalanche and Polygon pools totaled **39.2%** of total Aave TVL (**\$14.1B**). This is largely due to incentives on both Polygon and Avalanche. In recent months, TVL has increased across Avalanche and Optimism, largely as a result of attractive incentives on the alternative network. During Q3, TVL on alternative chains remained relatively consistent at \$1.49B compared to \$1.50B in Q2. We have, however, seen a strong uptake in Optimism activity which is also correlated with incentives. TVL at the start of Q2 was \$8M, with TVL at the end of Q3 being \$415M.

Chain	Version	Launch Date
Arbitrum	aave_v3	2022-03-11
Avalanche	aave_v2	2021-09-20
Avalanche	aave_v3	2022-03-11
Fantom	aave_v3	2022-03-11
Harmony	aave_v3	2022-03-11
Ethereum	aave_amm	2021-03-08
Ethereum	aave_arc	2021-10-17
Ethereum	aave_rwa	2021-12-10
Ethereum	aave_v2	2020-12-01
Optimism	aave_v3	2022-03-11
Polygon	aave_v3	2022-03-11



Chain	Total Deposits	Total Loans	Utilization Rate	TVL	Variable Rate Loans	Stable Rate Loans
Ethereum	5,648,984,118	1,582,755,449	28.02%	4,066,228,669	1,565,943,106	16,812,343
Avalanche	1,352,531,585	609,094,656	45.03%	743,436,929	556,942,745	52,151,911
Optimism	1,252,408,096	797,340,176	63.66%	455,067,920	797,142,801	197,376
Polygon	403,736,839	99,578,769	24.66%	304,158,071	98,656,479	922,290
Arbitrum	41,977,594	11,552,633	27.52%	30,424,962	11,362,451	190,182
Fantom	3,365,803	942,553	28.00%	2,423,251	842,166	100,386
Harmony	3,196,434	1,509,648	47.23%	1,686,786	1,509,526	121



Key Governance Decisions

Harmony Market Freeze

The Harmony market freeze was initiated to mitigate the risk of the exploit on Harmony's Horizon Bridge

July 13, 2022

Aave Companies Retro Payment

This proposal is intended to provide retroactive funding to Aave companies to compensate the business for the work on Aave V3. Total compensation was \$16.28M, paid in various tokens, a mix of stablecoins, high volatility assets, and AAVE.

August 10, 2022

Re-enabling ETH Borrowing Post-Merge

This post set forward the plan to re-enable borrowing post merge. This was a success and no significant issues arose from the reenabling of borrowing.

September 6, 2022

Chaos Labs <> Aave Proposal

Chaos Labs has put forward a proposal to perform risk management and parameter recommendations for all V3 markets. It has passed its Snapshot vote and is moving towards an on-chain vote.

September 26, 2022

July 7, 2022

Greenlight for GHO

Aave Companies proposed to the forum the introduction of a native decentralized, collateral-backed stablecoin, GHO, pegged to USD. This was well received by the community.

August 2, 2022

Fantom V3 Freeze

After the Harmony bridge event and the Nomad bridge exploit, this proposal was raised to consider the risk/benefits of keeping an active Aave V3 market on fantom as this network is dependent on anyswap (multichain) bridge.

August 23, 2022

ETH PoW Migration Plan

Ahead of the Ethereum Merge, the Aave protocol faces the risk of high utilization in the ETH market. This proposal temporarily paused ETH borrowing in order to mitigate the risk of high utilization around the time of the merge.

September 19, 2022

Llama <> Aave Proposal

Llama outlined a 12-month proposal to work with Aave on treasury management, protocol upgrades, growth, and analytics. Llama has worked with Aave on multiple projects through the Grants DAO and had support from their team to propose a 12 month scope with Aave directly. This proposal passed with 99.99% approval.



Financial Stability Measures



Annualized Revenue

Utilizing data from Q3 we have created an average expected revenue figure per month. We have prorated this for a full 12 month period.

Total annualized revenue of Aave Pools is **\$18.3M**. This includes all V1, V2 and V3 deployments. The standout performer in Q3 has been Optimism, benefitting from OP incentives in place on the network. When incentives reduce, we anticipate revenue to fall slightly.

These number do not include the revenue generating potential of GHO. Aave's actual historical YTD revenue looking back over the last 12 months is **\$19.5M**, which is higher than the forward looking **\$18.3M**. The disparity is likely due to the strong performance in Q2 and Q3 2021 on mainnet, which has since curtailed towards the end of the year and into 2022

Do note, these numbers serve as a guide and reflect only the methodology applied.

Ethereum Network



Annualized revenue

\$10.3M

Polygon Network



Annualized revenue

\$760k

Avalanche Network



Annualized revenue

\$4.5M

Harmony Network



Annualized revenue

\$121k

Fantom Network



Annualized revenue

\$21k

Arbitrum Network



Annualized revenue

\$32k

Optimism Network



Annualized revenue

\$2.6M

Total Annualized Revenue



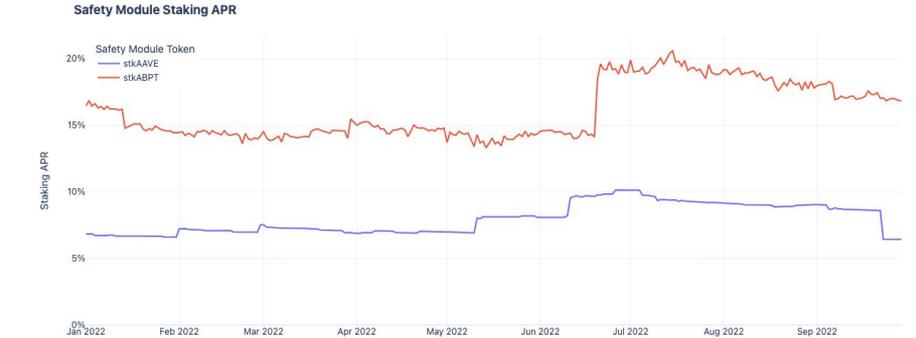
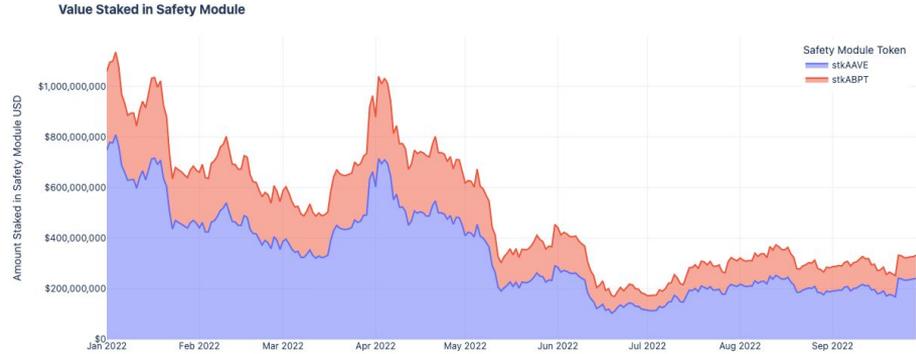
Annualized revenue

\$18.3M

The Safety Module

The Safety Module (SM) forms the backstop for Aave which shields users in the event of a shortfall. Users can stake either AAVE tokens or Aave Balancer Pool Tokens (ABPT) to earn a 6.43% and 16.86% yield, respectively, in the SM. A shortfall event occurs when capital is lost due to a failure of Aave smart contracts, oracles, or the liquidation process.

Stakers expose 30% of their staked tokens to cover the shortcomings in a shortfall event. This risk is rewarded by daily emissions of AAVE tokens. These payments are made from the AAVE Ecosystem Reserve.



Emission rates are set by AAVE Governance.

Daily stkAAVE emissions



Daily stkABPT emissions





Financial Accounts



Treasury Balance and Contract Information

Treasury Information

Category	Value
AAVE Contract address	0x7fc66500c84a76ad7e9c93437bfc5ac33e2ddae9
Treasury Balance (USD)	\$153.4m

Aave Token information

Category	Value
Name	Aave
Symbol	AAVE
Type	ERC-20
 Holders	388,956
Current Price (USD)	\$74.59 - EOM price
Transfers Count	1,686,196
Senders	294,277
Receivers	388,750
Total supply	16,000,000
First transfer	2020-10-02
Latest transfer	2022-09-30

Disclaimer - all information stated above was correct as of 30th September 2022 using information from [coingecko.com](https://www.coingecko.com)

Aave Treasury

A Detailed Holding Summary

Symbol	EOM Balance	Holdings
<i>TOKENS</i>	\$	%
AAVE	118,941,115	77.55
USDC	15,145,574	9.88
DAI	9,686,449	6.32
USDT	6,281,774	4.10
ETH	1,097,848	0.72
wBTC	102,796	0.07
wAVAX	553,782	0.36
wMATIC	86,910	0.06
CRV	135,441	0.14
Other Stables	843,906	0.84
Other Assets	490,498	0.49
Total	153,366,093	100

\$114.2M

Ecosystem Reserve Holding

Price action across the crypto market has caused a decline in the **Ecosystem Reserve** since the beginning of 2022. This is a result of a concentrated AAVE holding within the treasury, third party spending from the reserve and market pricing.

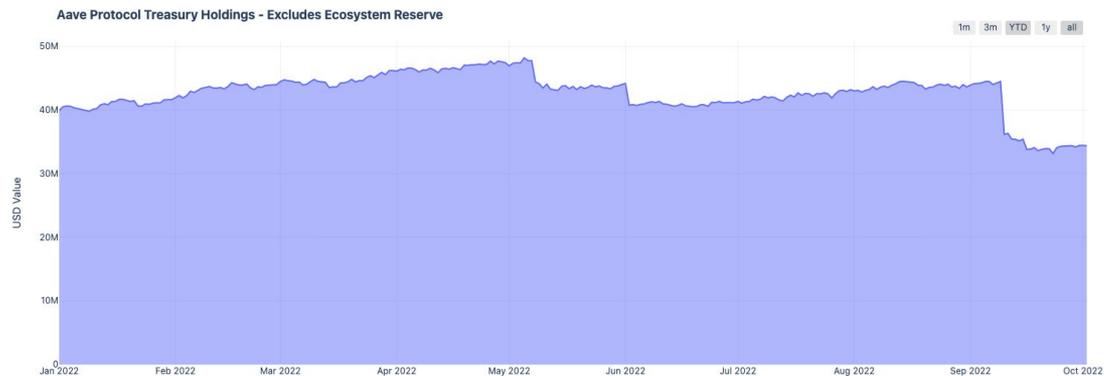
During September, AAVE price decreased slightly, resulting in a reduction of the Ecosystem Reserve's valuation. Additionally, there were \$10m of payments made to third parties from the Reserve. The balance currently stands at \$114.2m.

Treasury Holdings Over Time



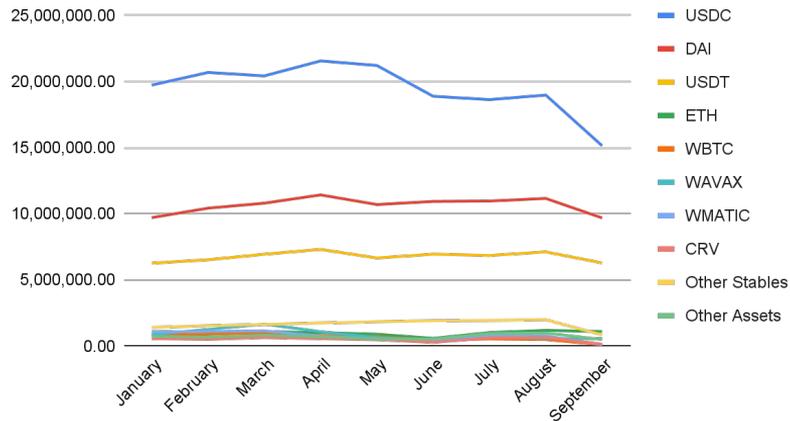
The Ecosystem Reserve has seen a constant downtrend since the start of Q2 of 2022, which ties in with the significant market downturn following the issues with UST and the demand for Aave loans.

Protocol treasury holdings have remained relatively consistent over the past 12 months. Reserves are 93% denominated in stablecoin and stablecoin derivatives.

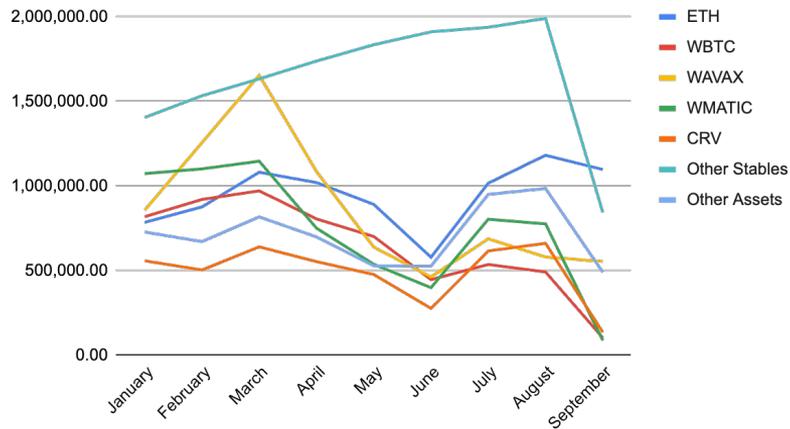


Treasury Composition Over Time (excl AAVE)

All assets



Assets under \$5m





Detailed Profit or (Loss) Across All Pools



Income Statement (January - September 2022)



	Q1 Total	Q2 Total	July	August	September	YTD
Revenue	\$	\$	\$	\$	\$	\$
Ethereum - V1	4,570	872	-	-	-	5,442
Ethereum - V2	4,347,050	3,426,068	548,854	898,317	1,102,400	10,322,690
Ethereum - AMM	4,704	1,704	200	357	680	7,645
Ethereum - ARC	13,378	12,213	6,752	3,314	6,858	42,515
Ethereum - RWA	3,619	6,827	959	1,094	465	12,964
Avalanche - V2	2,271,234	572,441	5,658	6,209	12,543	2,868,086
Polygon - V2	1,878,298	309,212	27,763	64,217	47,631	2,327,120
Polygon - V3	801	44,951	10,163	22,949	17,193	96,058
Arbitrum - V3	542	9,795	1,880	2,433	3,696	18,345
Avalanche - V3	283	1,936,211	484,632	358,475	261,498	3,041,098
Fantom - V3	343	11,609	1,250	2,657	1,414	17,273
Harmony - V3	48	18,125	29,127	539	489	48,328
Optimism - V3	34	4,717	941	348,376	298,082	652,151
Total Revenue	8,524,904	6,354,746	1,118,178	1,708,937	1,752,951	19,459,715
Cost of Sales						
Liquidity Incentives	(18,339,154)	(8,799,273)	(569,025)	(436,381)	(300,738)	(28,444,570)
Staking rewards	(12,146,122)	(13,017,415)	(1,720,772)	(2,907,122)	(1,933,015)	(31,724,446)
Third party expenses	(4,852,934)	(9,439,192)	(2,465,890)	(367,604)	(17,061,015)	(34,186,636)
Total Cost of Sales	(35,338,210)	(31,255,880)	(4,755,686)	(3,711,107)	(19,294,768)	(94,355,652)
Gross Profit/(Loss)	(26,813,307)	(24,901,134)	(3,637,508)	(2,002,170)	(17,541,818)	(74,895,937)

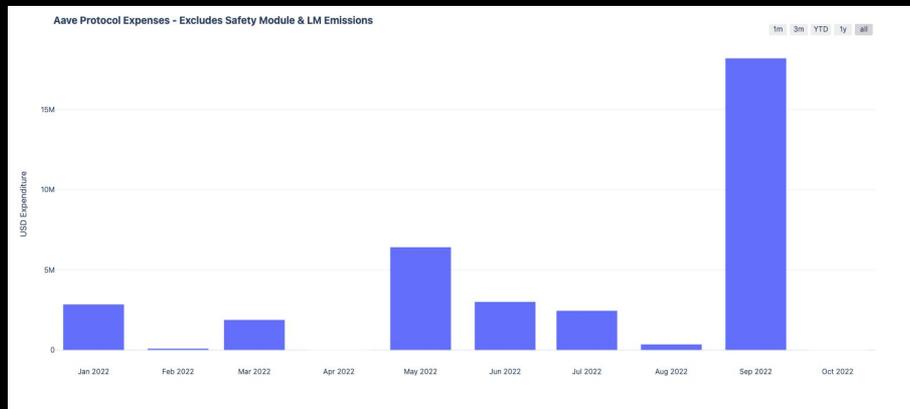
Significant P/L Items

As seen in the P/L and chart on this slide, there has been a significant increase in third party payments in Q3. September saw the retroactive compensation of Aave Companies following the creation of Aave V3.

The funding has enabled V3 to solve a number of issues with previous versions of Aave, such as:

- New modes such as High Efficiency Mode and Isolation Mode, which allow for increased capital efficiency while limiting risks for the protocol.
- Risk management improvements providing additional protection to the protocol through risk caps and other tools.
- L2-specific features which improve user experience and reliability.
- Portal, which allows assets to seamlessly flow between Aave V3 markets over different networks

A total of \$15M in retroactive funding covers a period of 18 months prior to September, so while the expense was paid in September, it should be spread over the last 18 months. However, due to accounting on a cash basis, the expense is incurred when paid.



V3 Average Monthly Revenue

\$612,595

Utilizing income to date, we have calculated average income per month generated from V3. We have taken an average across the 3 month period. This may be slightly inflated given strong revenues on Avalanche and Optimism as a result of token incentives.

Payback Period

~ 25 Months

Taking average income generated from Aave V3 across multiple markets, the estimated payback period before V3 becomes profitable is 25 months. This period may be longer in reality as incentives on new markets have provided skewed revenue figures in certain months.



Tokenflow Statement



Tokenflow Statement



	Q1	Q2	July	August	Sept	YTD
Economic Reserve	\$	\$	\$	\$	\$	\$
Inflows	-	-	-	-	-	-
Outflows	(47,598,774)	(25,034,132)	(3,971,524)	(3,788,356)	(9,278,941)	(89,671,727)
Net Flows	(47,598,774)	(25,034,132)	(3,971,524)	(3,788,356)	(9,278,941)	(89,671,727)
All Other Reserves	\$	\$	\$	\$	\$	\$
Inflows	8,482,042	5,669,045	560,979	2,970,712	1,722,602	19,405,379
Outflows	(1,092,347)	(6,655,934)	(786,760)	-	(11,152,654)	(19,687,695)
Net Flows	7,389,694	(986,889)	(225,781)	2,970,712	(9,430,052)	(282,315)

AAVE 

Pool Analysis



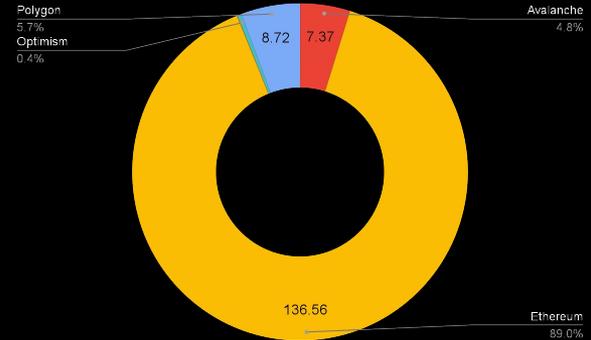
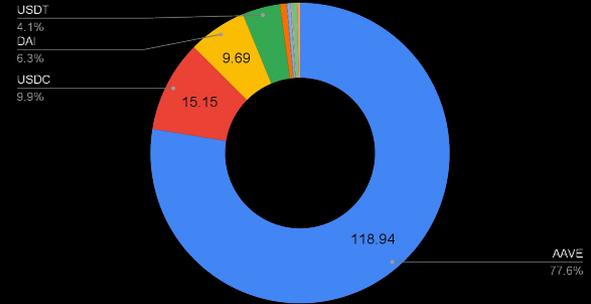
Treasury Assets - All Networks USD (M)

Treasury assets across all networks have been included within the analysis and breakdown. We have split the treasury by asset and also by chain. This includes the following:

- Aave Ecosystem Reserve
- Arbitrum
- Avalanche
- Fantom
- Harmony
- Optimism
- Polygon

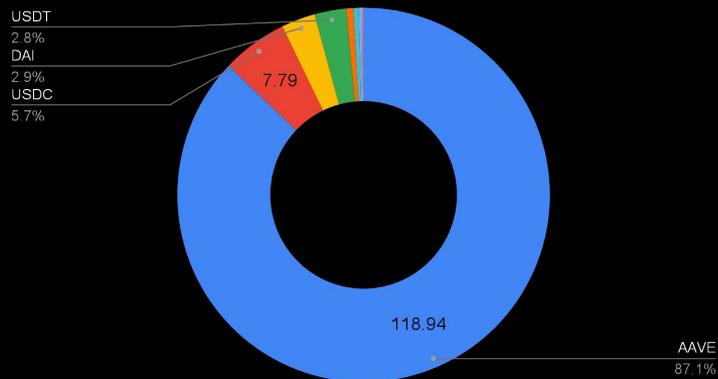
The treasury is composed largely of Aave (**77.6%**) and stablecoin assets (**20.8%**). The \$ value of stablecoin assets has remained relatively constant since the end of July.

Aave Treasury Assets (\$)

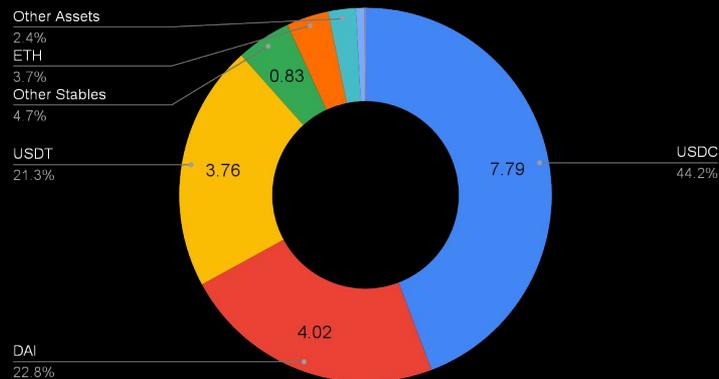


Assets by Network - Ethereum (\$M)

Ethereum Network Reserve incl. Ecosystem Reserve % (\$)

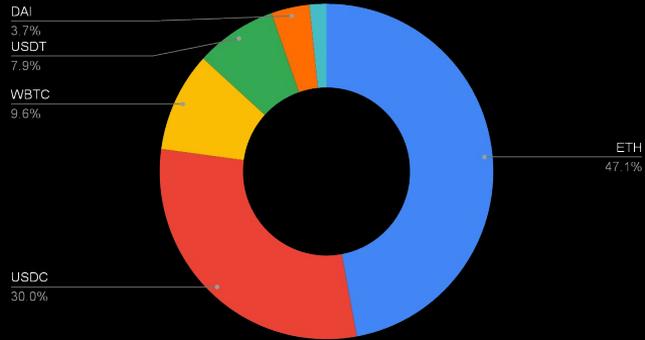


Reserve Factor Holdings % (\$)

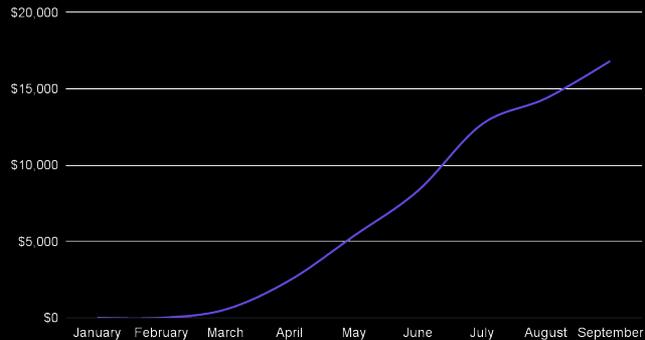


Assets by Network - Arbitrum

Arbitrum Network Reserve % (\$)



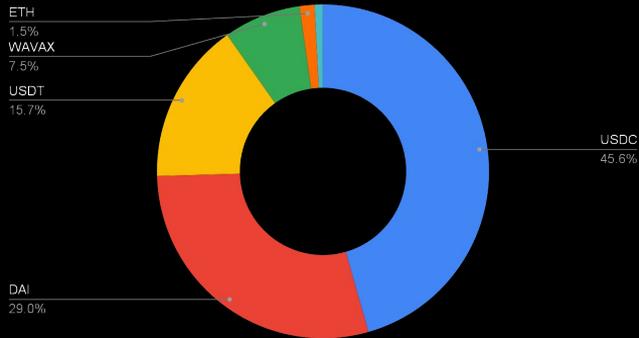
Arbitrum Reserve over time (EOM \$ Value)



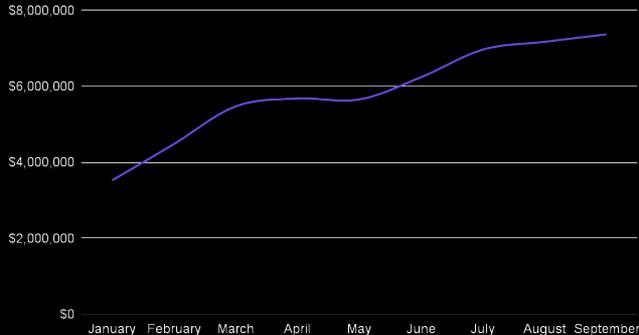
Symbol	EOM Balance	Increase/(Decrease) from June
TOKENS	\$	%
ETH	7,924.64	9.44
USDC	5,055.72	18.45
wBTC	1,619.09	52.98
USDT	1,326.63	18.10
DAI	623.06	14.79
Other Assets	278.28	86.92
Total	16,827.44	

Assets by Network - Avalanche

Avalanche Network Reserve % (\$)



Avalanche Reserve over time (EOM \$ Value)

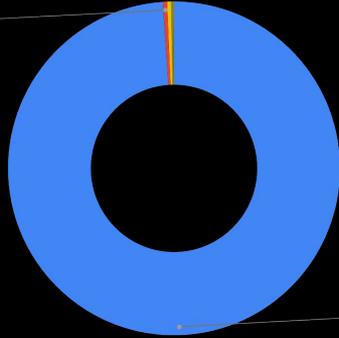


Symbol	EOM Balance	Increase/(Decrease) from June
TOKENS	\$	%
USDC	3,358,638.23	2.60
DAI	2,133,786.00	1.17
USDT	1,153,345.01	9.44
WAVAX	553,781.56	(4.54)
ETH	107,214.49	11.72
WBTC	58,000.67	0.09
Other Assets	2,707.20	143.12
AAVE	21.86	(12.41)
Total	7,367,495.03	

Assets by Network - Harmony

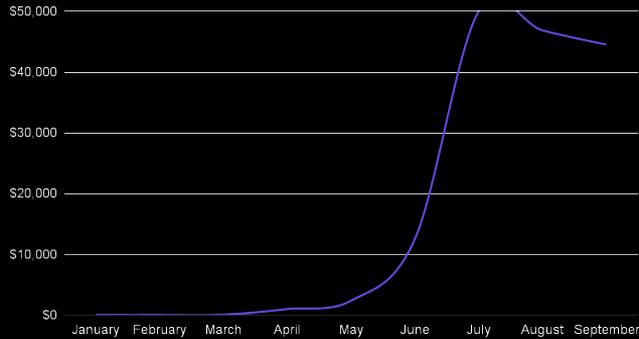
Harmony Network Reserve % (\$)

USDC
0.4%



Other Assets
98.9%

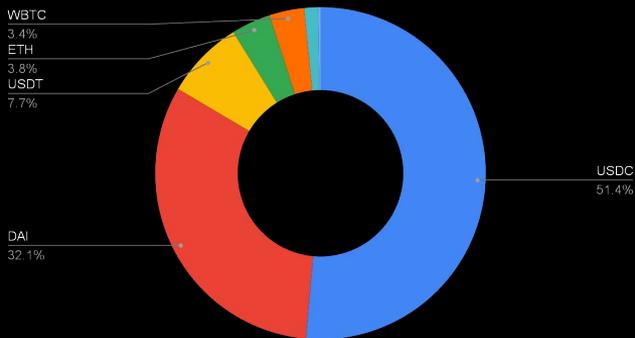
Harmony Reserve over time (EOM \$ Value)



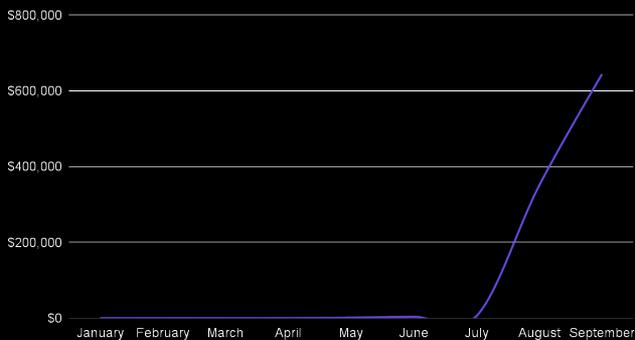
Symbol	EOM Balance	Increase/(Decrease) from June
<i>TOKENS</i>	\$	%
Other Assets	44,024.60	(4.99)
USDC	178.76	7.68
ETH	176.36	(13.39)
WBTC	74.68	(2.88)
USDT	42.89	0.38
DAI	8.55	0.05
Total	44,505.85	

Assets by Network - Optimism

Optimism Network Reserve % (\$)



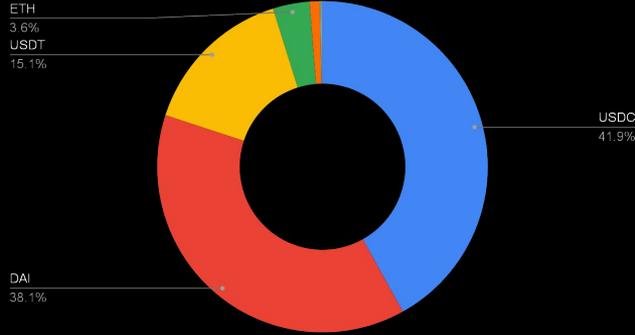
Optimism Reserve over time (EOM \$ Value)



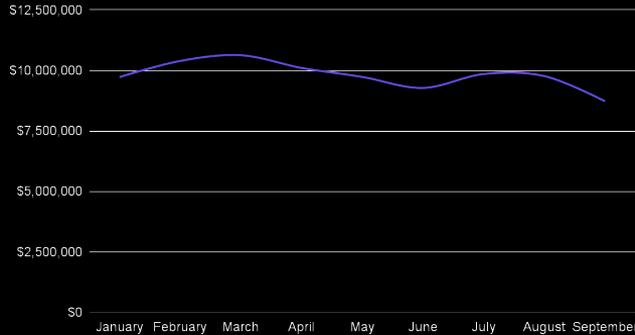
Symbol	EOM Balance	Increase/(Decrease) from June
TOKENS	\$	%
USDC	331,330.70	80.27
DAI	206,547.27	94.66
USDT	49,514.39	81.65
ETH	24,781.43	100.73
wBTC	21,999.27	41.14
Other Stables	8,754.52	90.24
Other Assets	1,495.85	15.69
AAVE	2.02	55.20
Total	644,425.47	

Assets by Network - Polygon

Polygon Network Reserve % (\$)



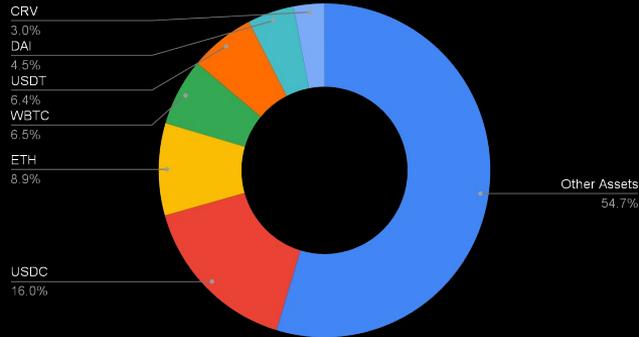
Polygon Reserve over time (EOM \$ Value)



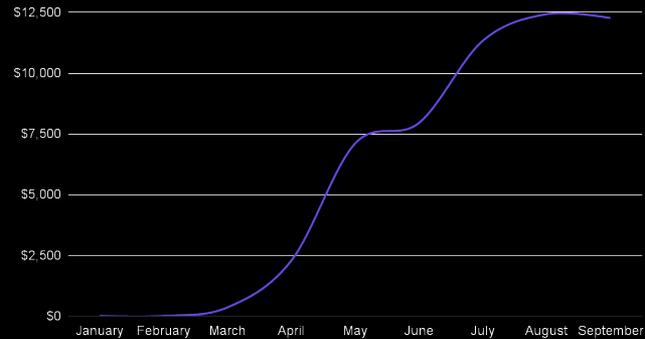
Symbol	EOM Balance	Increase/(Decrease) from June
<i>TOKENS</i>	\$	%
USDC	3,656,223.55	0.01
DAI	3,324,922.34	(0.07)
USDT	1,318,947.56	0.51
ETH	313,422.17	(8.20)
wMATIC	86,910.35	(88.80)
Other Assets	10,513.88	6.20
wBTC	6,806.48	(97.99)
CRV	2,655.91	(16.17)
Other Stables	1,666.45	22.83
AAVE	548.30	(3.32)
Total	8,722,617.00	

Assets by Network - Fantom

Fantom Network Reserve (\$)



Fantom Reserve over time (EOM \$ Value)



Symbol	EOM Balance	Increase/(Decrease) from June
TOKENS	\$	%
Other Assets	6,701.70	(4.78)
USDC	1,956.32	3.91
ETH	1,094.18	(12.68)
WBTC	799.66	8.19
USDT	781.03	23.52
DAI	556.23	30.00
CRV	366.51	(17.23)
AAVE	2.10	(12.54)
Total	12,257.72	

Notes to Financial Statements

Income

Income includes:

- Protocol fees received - Reserve Factor income for V1, V2, AMM, ARC & RWA, liquidations income from V3
- Protocol fees accrued - Reserve Factor income for V3. These fees are accrued in the V3 contracts rather than an explicit token transfer as per earlier versions. These fees are harvested by Llama manually via `MintToTreasury()` calls. V3 fees are only shown as accrued fees in the income statement, and become tokenflows when a `MintToTreasury()` is called (see `May tokens_in` on Avalanche V3)
- aToken interest accrued - aTokens held by treasury contracts attract interest the same as a normal user deposit in Aave

Expenses

Expenses include:

- LM rewards paid in AAVE tokens from the V2 Incentives Controller contract on deposits & borrows in Aave V2
- Staking rewards paid in AAVE tokens to `stkAAVE` holders, paid from the Ecosystem Reserve
- Staking rewards paid in AAVE tokens to stakers of the Balancer Pool tokens in the Safety Module, paid from the Ecosystem Reserve
- Direct payments from the treasury contracts to third parties (BGD, Aave Grants DAO etc), paid in aTokens or other denominations (USDC etc). These are tagged as 'Aave V2' below as they normally come from the Aave V2 Treasury contract.
- Direct payments from the Ecosystem Reserve to third parties (BGD, Aave Grants DAO etc), paid in AAVE tokens

Expenses do not include LM rewards on other chains (`wMATIC` on Polygon, `wAAVE` on Avax, `wCFG` on RWA etc) as these are funded by third parties to drive liquidity onto their platforms.

Please note that staking and LM rewards reported are only those which are *claimed* in that period, and do not include future liabilities that are accrued and not yet claimed. This may be incorporated in later reporting cycles if there is demand.

Appendix - Wallet addresses used

Arbitrum	Aave V3	0x053D55f9B5AF8694c503EB288a1B7E552f590710
Avalanche	Aave V2	0x467b92aF281d14cB6809913AD016a607b5ba8A36
Avalanche	Aave V3	0x5ba7fd868c40c16f7aDfAe6CF87121E13FC2F7a0
Ethereum	Aave AMM	0x464C71f6c2F760DdA6093dCB91C24c39e5d6e18c
Ethereum	Aave ARC	0x464C71f6c2F760DdA6093dCB91C24c39e5d6e18c
Ethereum	Aave RWA	0x464C71f6c2F760DdA6093dCB91C24c39e5d6e18c
Ethereum	Aave V1	0xE3d9988F676457123C5fD01297605efdD0Cba1ae
Ethereum	Aave V1	0x464C71f6c2F760DdA6093dCB91C24c39e5d6e18c
Ethereum	Aave V2	0x464C71f6c2F760DdA6093dCB91C24c39e5d6e18c
Ethereum	Ecosystem Reserve	0x25F2226B597E8F9514B3F68F00f494cF4f286491
Ethereum	V2 Incentives Controller	0xd784927Ff2f95ba542BfC824c8a8a98F3495f6b5
Fantom	Aave V3	0xBe85413851D195fC6341619cD68BfDc26a25b928
Harmony	Aave V3	0x8A020d92D6B119978582BE4d3EdFdC9F7b28BF31
Optimism	Aave V3	0xB2289E329D2F85F1eD31Adbb30eA345278F21bcf
Polygon	Aave V2	0x7734280A4337F37Fbf4651073Db7c28C80B339e9
Polygon	Aave V3	0xe8599F3cc5D38a9aD6F3684cd5CEa72f10Dbc383

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