

Guide to 2024 Q4 Crypto Markets

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About this Report

The Guide to Crypto Markets is a joint publication of Coinbase Institutional and Glassnode. It equips investors with a deeper understanding of crypto markets by providing a comprehensive view of the metrics and trends that matter the most to institutional investors. For more information on any of the charts in the Guide, or on the crypto markets in general, please reach out to us [here](#). To see more of Coinbase Institutional's research and insights, visit our [Research & Insights Hub](#).

All of the data and charts included in this report reflect information through September 30, 2024, unless otherwise noted.

About Coinbase Institutional

Coinbase Institutional is the trusted bridge to crypto markets for institutions. Built by experienced leaders from traditional financial services, Coinbase Institutional understands how to deliver scalable solutions to all types of institutions with industry-leading security and compliance. We work with a diverse set of institutional clients, including investors, liquidity providers, corporates, financial institutions, and private clients to develop solutions that meet their unique requirements.

About Glassnode

Glassnode is the leading market intelligence provider in the digital asset space, primarily focused on institutions. Glassnode's platform delivers unparalleled on-chain analytics and deep insights into Bitcoin, Ethereum, and selected major digital assets. Founded in 2017, Glassnode equips institutional investors, hedge funds, banks, and asset managers with near real-time, data-driven intelligence, enabling informed decision-making in a highly dynamic trading environment.

A Maturing Market



David Duong
Coinbase
Head of Institutional Research



Glassnode Analyst Team

Crypto markets have largely been range bound as we head into the final quarter of 2024. The relative lack of direction can be attributed in part to the uncertainties that lie ahead, most notably the US elections.

But the lack of strong price moves doesn't mean that crypto is stuck in a holding pattern. In fact, we've seen ample signs that the market has matured dramatically this year.

From the runaway success of spot ETFs to the spike in onchain activity to the upswing in trading volumes, it's clear that markets have grown deeper, more liquid, more sophisticated, and more accessible.

Our spotlight themes this quarter (Surging Stablecoins and Leveling Up L2s) reflect the maturation of the market and the broadening of the crypto economy. And the insights shared by our partners help to frame the current environment and to shed light on what they consider to be the most important charts in crypto right now.

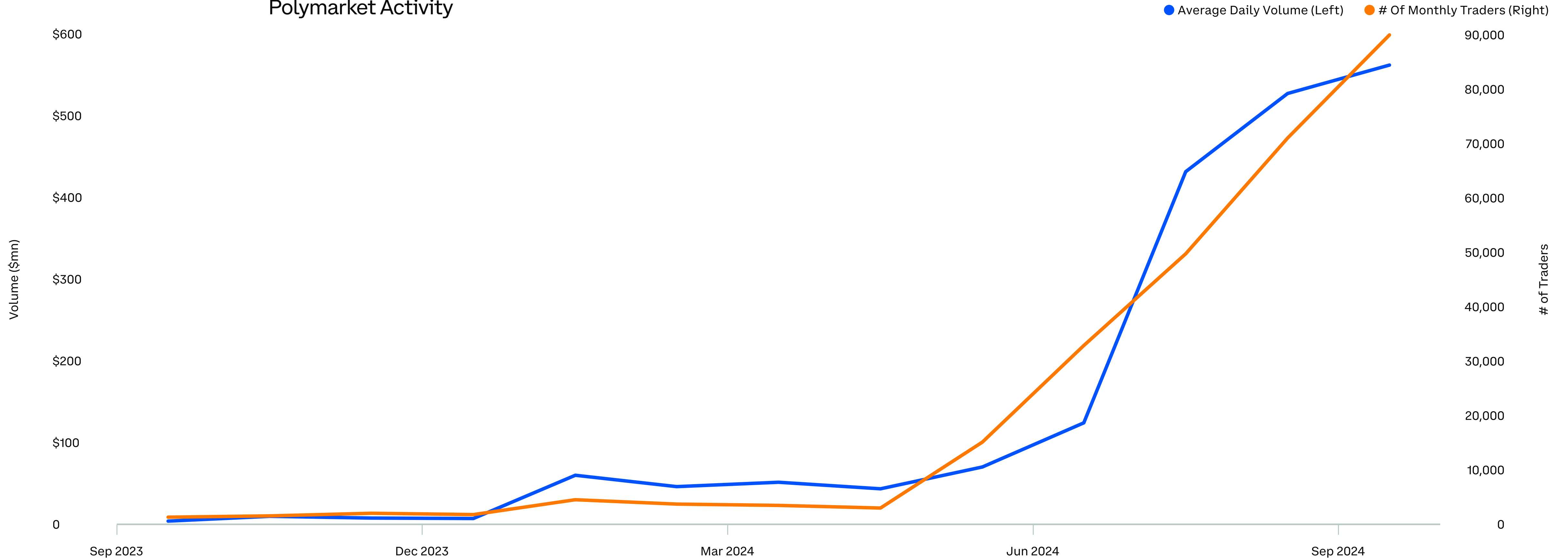
Throughout the Guide to Crypto Markets, we go beyond the headlines and dig deep into market data and onchain analytics to provide institutional investors with insights to understand the trends that are shaping markets today, and how they may impact the dynamic crypto economy going forward.

We hope you find the Guide useful as you navigate crypto markets, and we welcome your feedback and questions.

Partner Focus Grayscale

Polymarket, crypto's election-year breakout application, is a prime example of how blockchain technology can help increase transparency, access, and trust in markets and information.

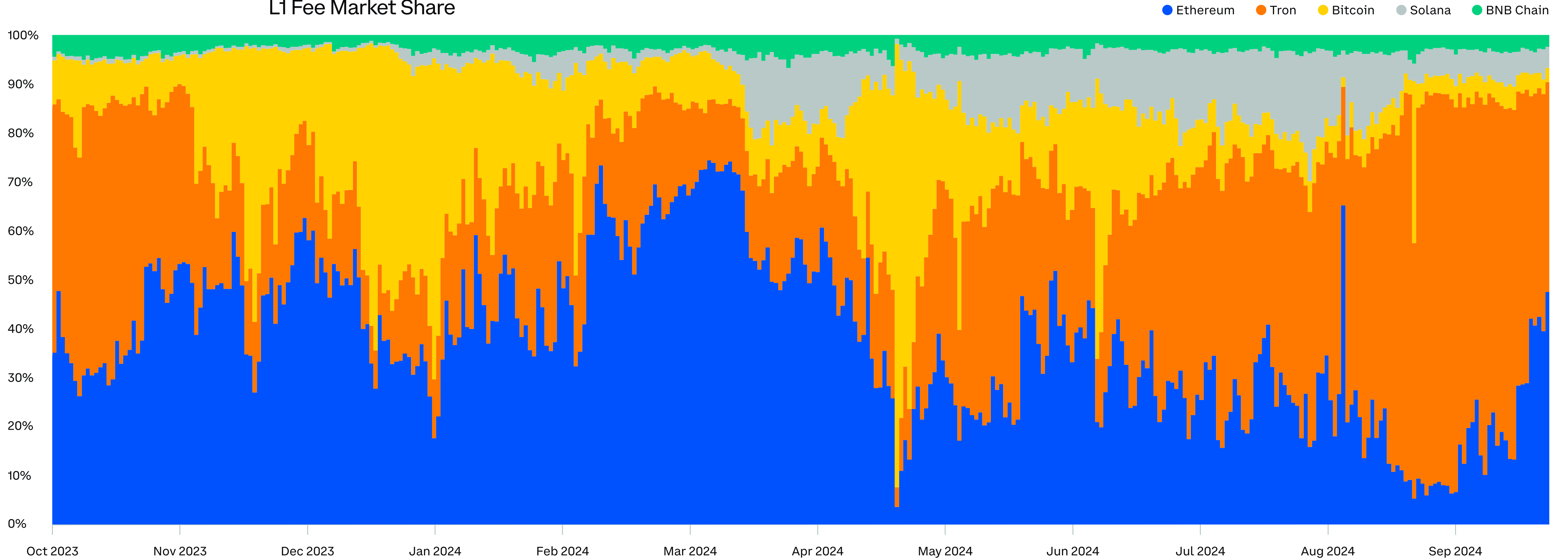
Polymarket Activity



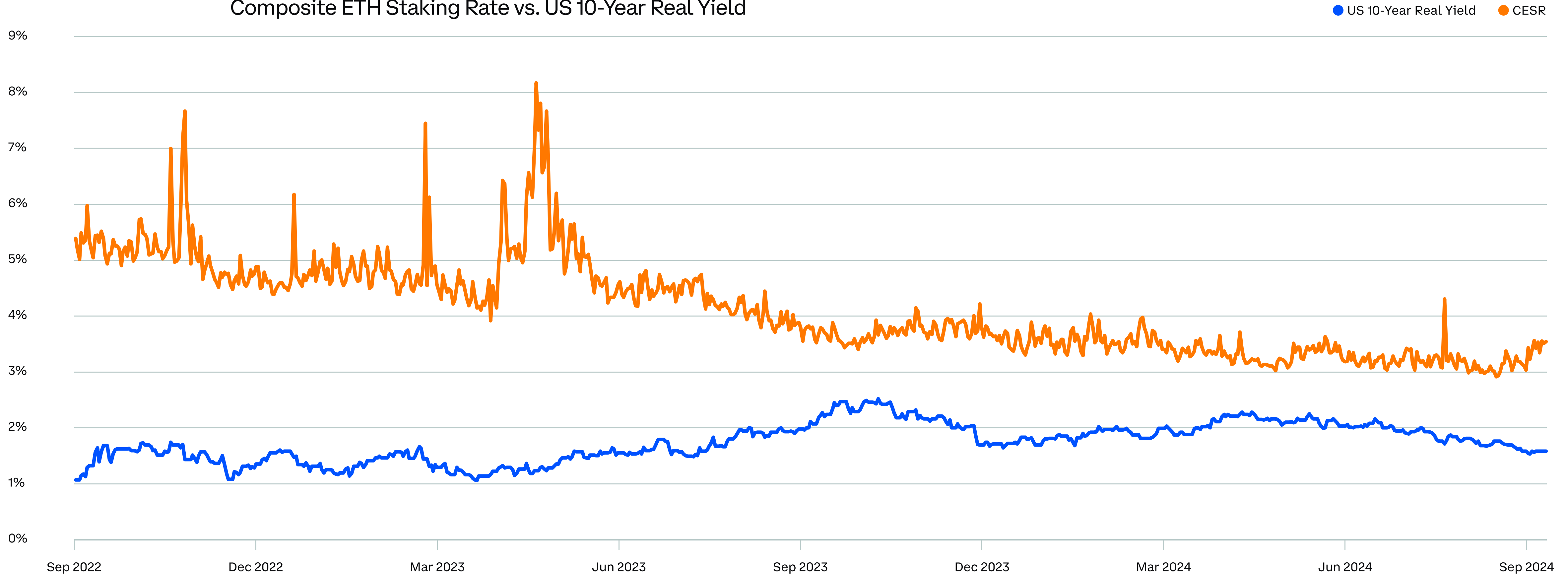
Partner Focus Van Eck

Ethereum has regained a substantial market share of fees among fee-earning L1 blockchains, rebounding from a low of 9% in late August to 40% in late September.

L1 Fee Market Share



Composite ETH Staking Rate vs. US 10-Year Real Yield



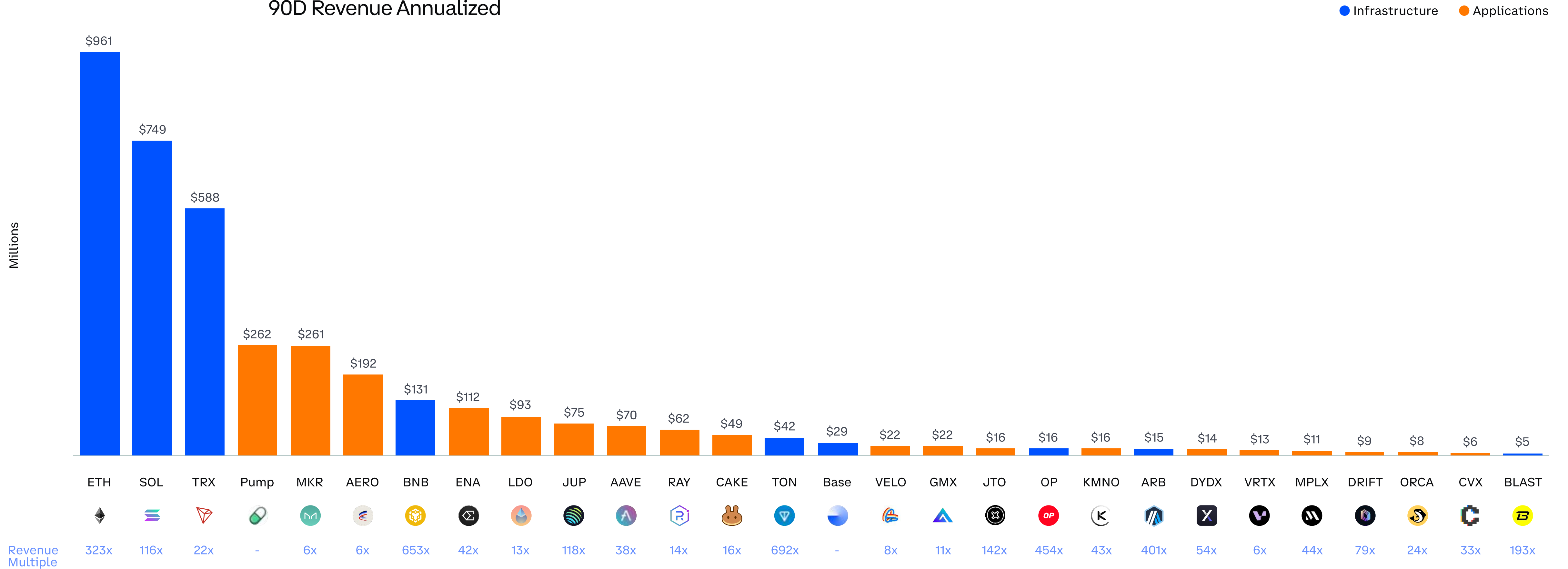
Source: CoinDesk Indices.

CESR measures the average annualized yield awarded to validators staking ether, and it is made up of two components: consensus reward and priority transaction fees. While ETH's inflation rate has been negative for much of its history, it has turned positive recently, so stakers should consider the impact on the staking yield.

Partner Focus Sycracy: Applications vs. Infrastructure

Many successful applications are now generating more revenue than the infrastructure they run on.

90D Revenue Annualized



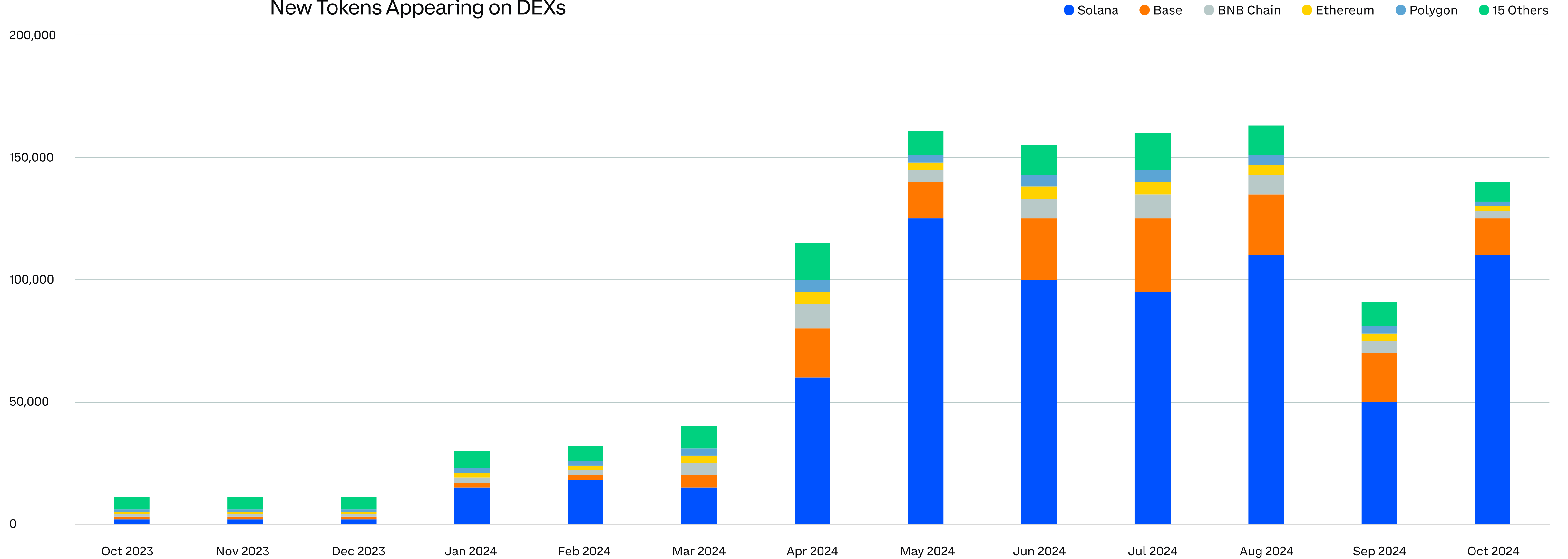
Sources: Token Terminal, MakerBurn, DeFiLlama, Tronscan.

Annualized revenue calculated using last 90 days. Solana revenue accounts for base fees, priority fees and MEV tips.
Data as of 9/25/2024.

Partner Focus Asymmetric Financial

Token launches have surged 13x in the last year, and Solana has garnered the lion's share.

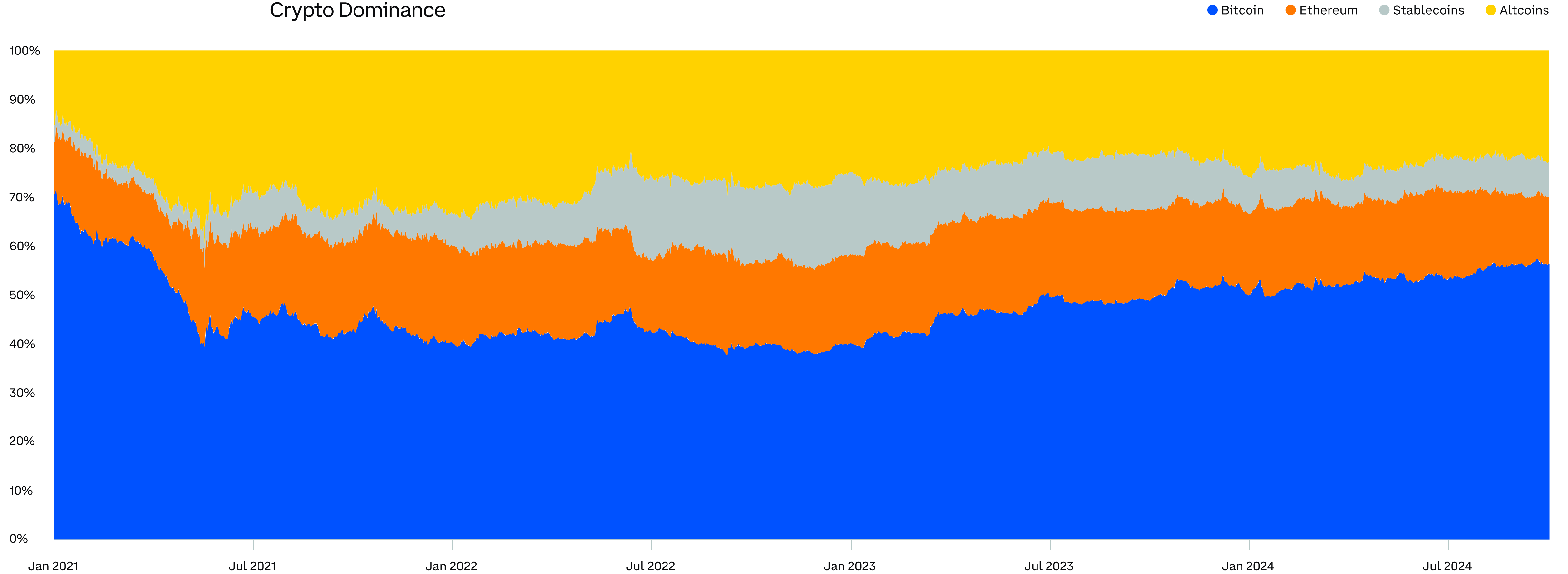
New Tokens Appearing on DEXs



01 Market Overview

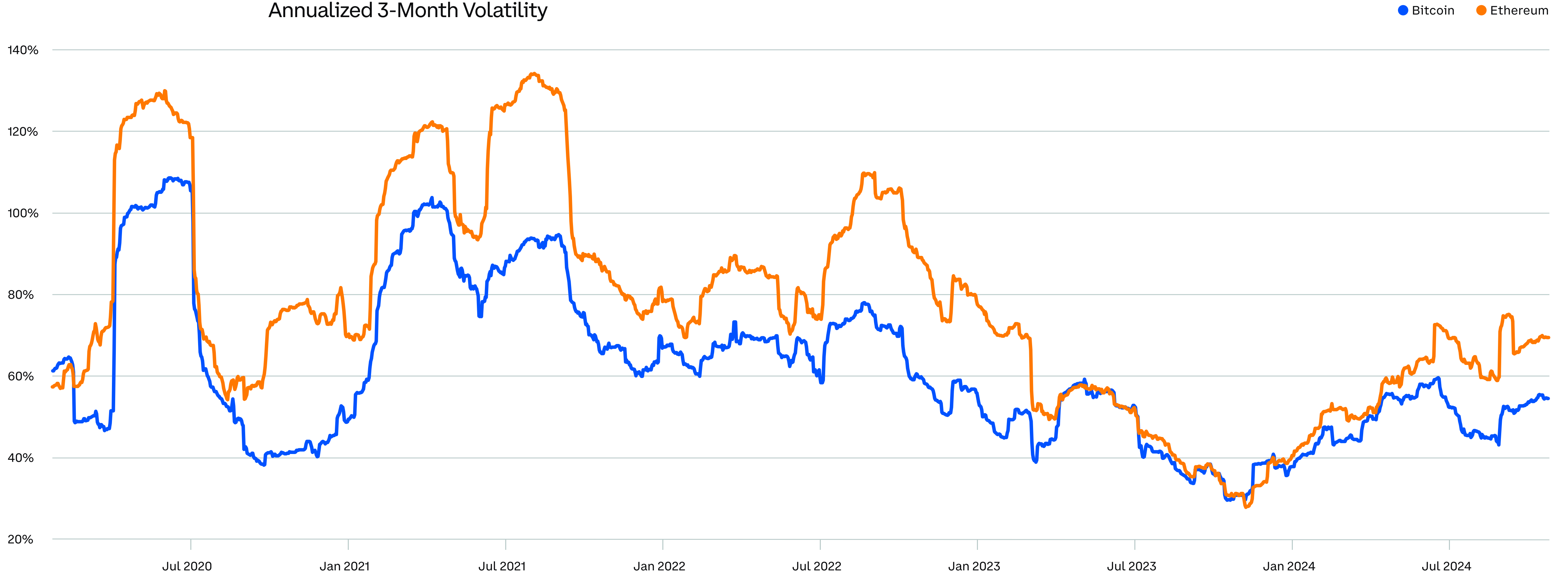
BTC and stablecoin dominance both rose in Q3 as market participants were drawn to the highest-quality assets.

Crypto Dominance



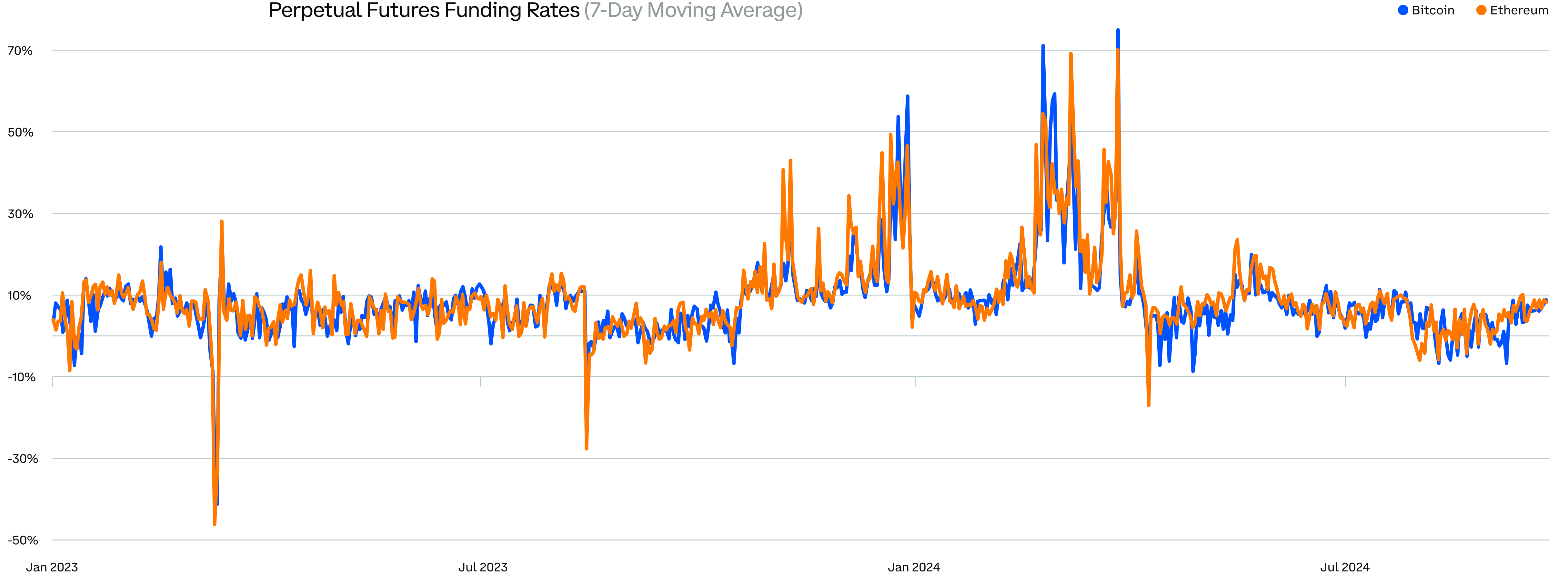
Volatility in BTC and ETH has trended meaningfully lower as markets have matured.

Annualized 3-Month Volatility



Perp funding rates traded in a tight range in Q3, indicating a balanced market between buyers and sellers.

Perpetual Futures Funding Rates (7-Day Moving Average)



Source: Glassnode.

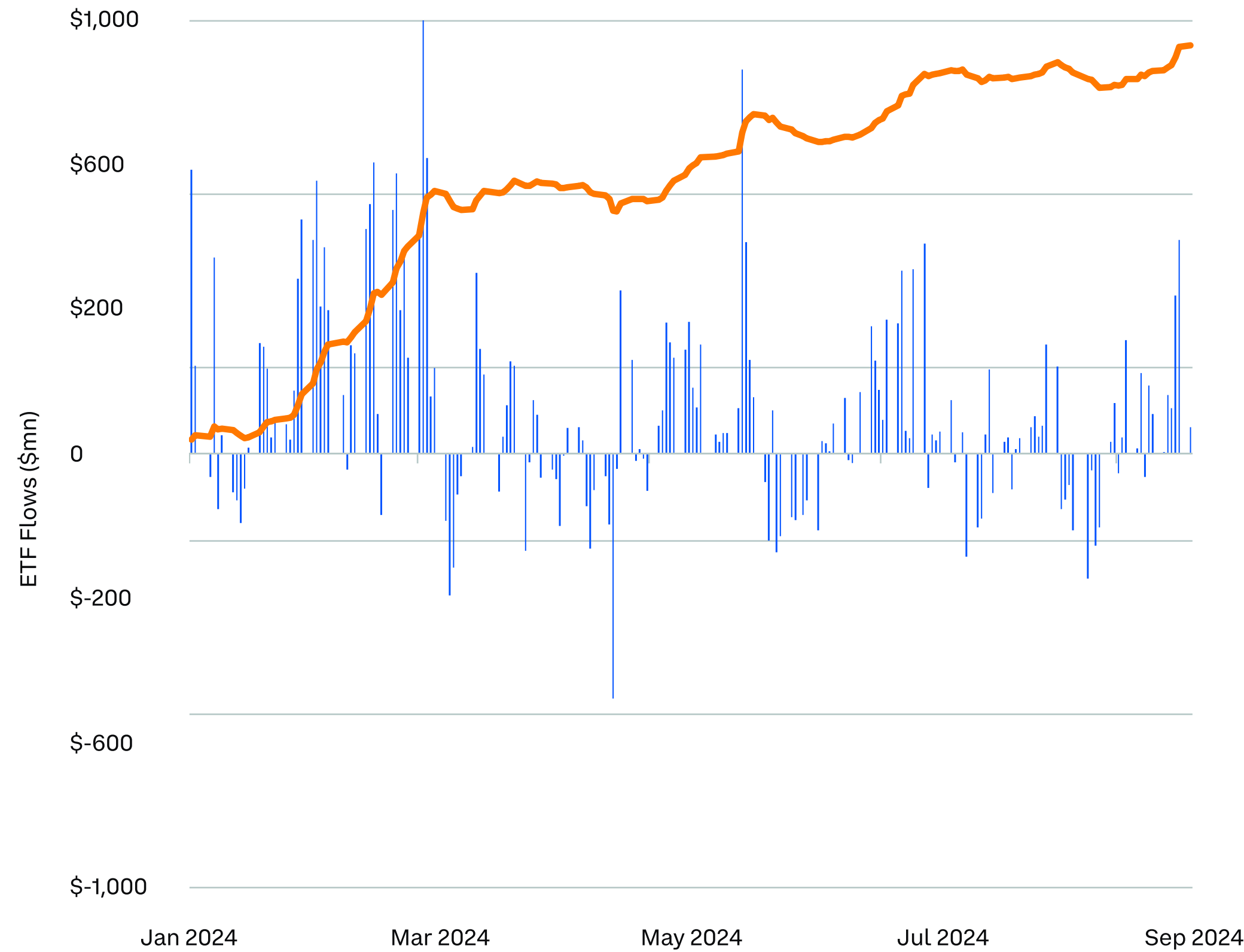
Perpetual futures (perps) do not have an expiration date, so holders do not need to roll their contracts. To prevent the price from deviating too far from spot prices, perps have a funding mechanism (the funding rate) that is periodically paid between long holders and short holders. When the funding rate is positive, longs pay shorts, and when the funding rate is negative, shorts pay longs. Perpetual futures are not available to trade for US investors.

US spot BTC ETFs attracted more than \$5 billion in net inflows in the third quarter.

US spot ETH ETF flows rebounded at the end of Q3 after several weeks of outflows.

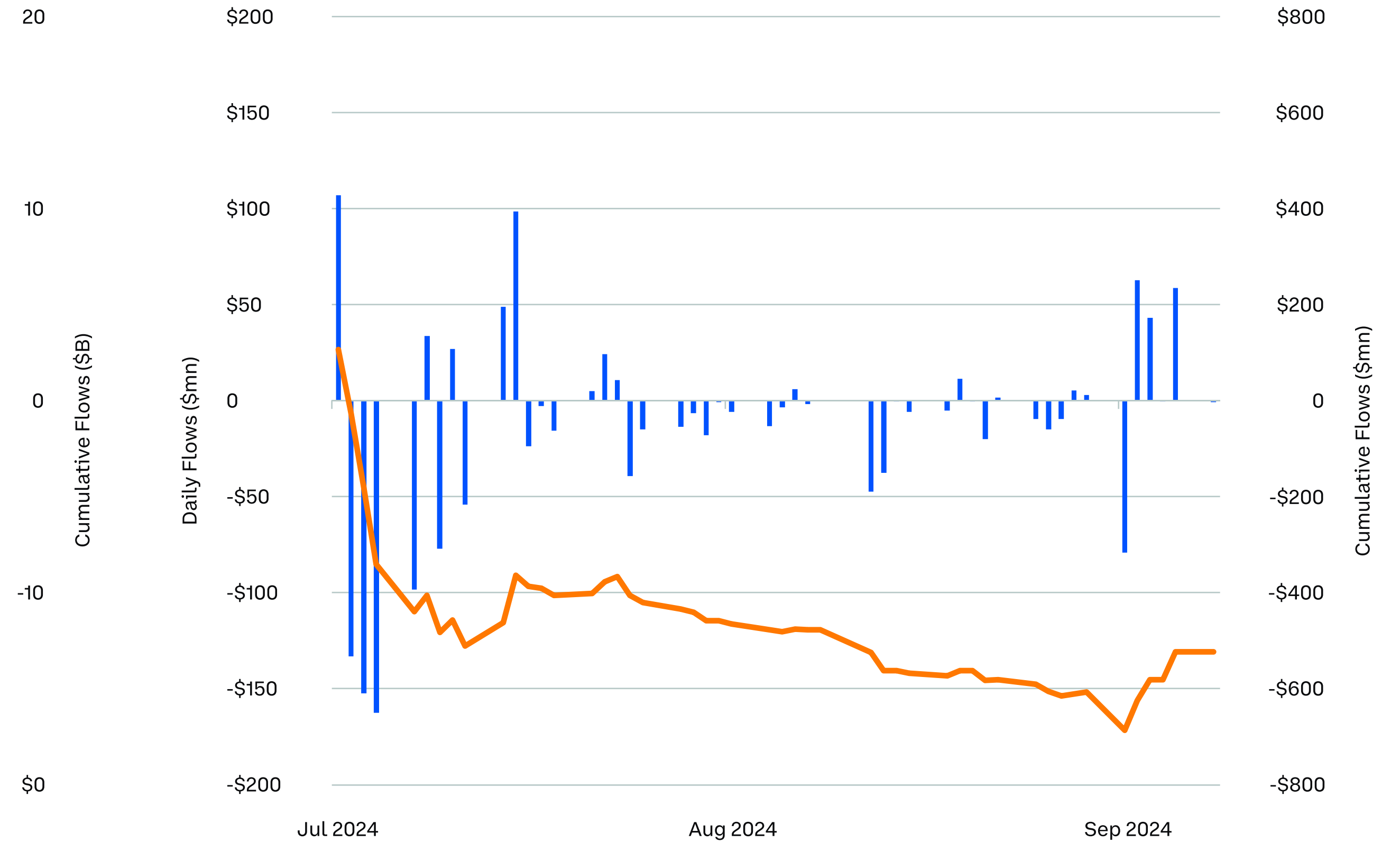
US Spot BTC ETF Flows

● Daily Flows ● Cumulative Flows



US Spot ETH ETF Flows

● Daily Flows ● Cumulative Flows

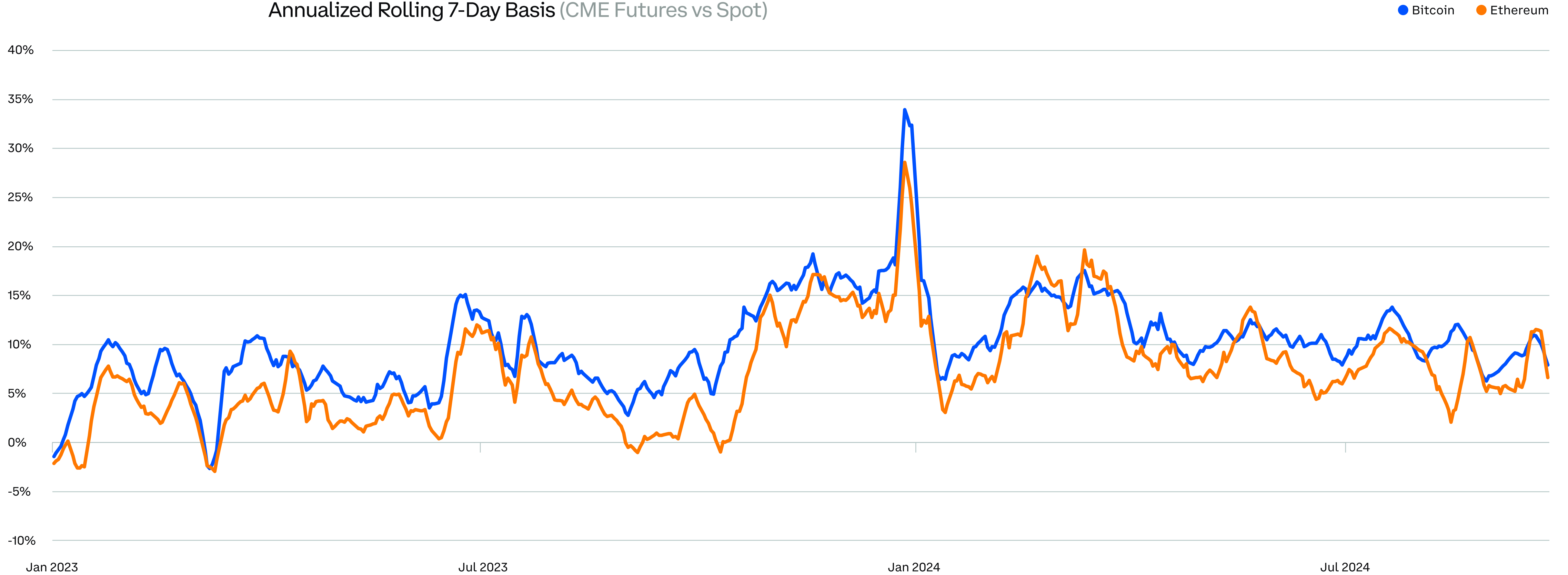


Sources: Bloomberg, Coinbase.

This metric shows the total net flow of funds of the leading Bitcoin and Ethereum ETFs traded in the U.S., reflecting the day-to-day changes in the ETFs' holdings. It is calculated as the difference between today's balance data point and the previously available balance data point in native units. Each day's native net flow is then converted into USD, leveraging the closing USD exchange rate at 16:00 New York time.

Basis (CME futures minus spot) for both BTC and ETH declined in Q3.

Annualized Rolling 7-Day Basis (CME Futures vs Spot)



Source: Glassnode.

The basis in crypto markets has historically been positive (outside of market dislocations). Extreme moves in the basis, both positive and negative, tend to be associated with large swings in sentiment.

Crypto exhibits low or negative correlations with all major asset classes.

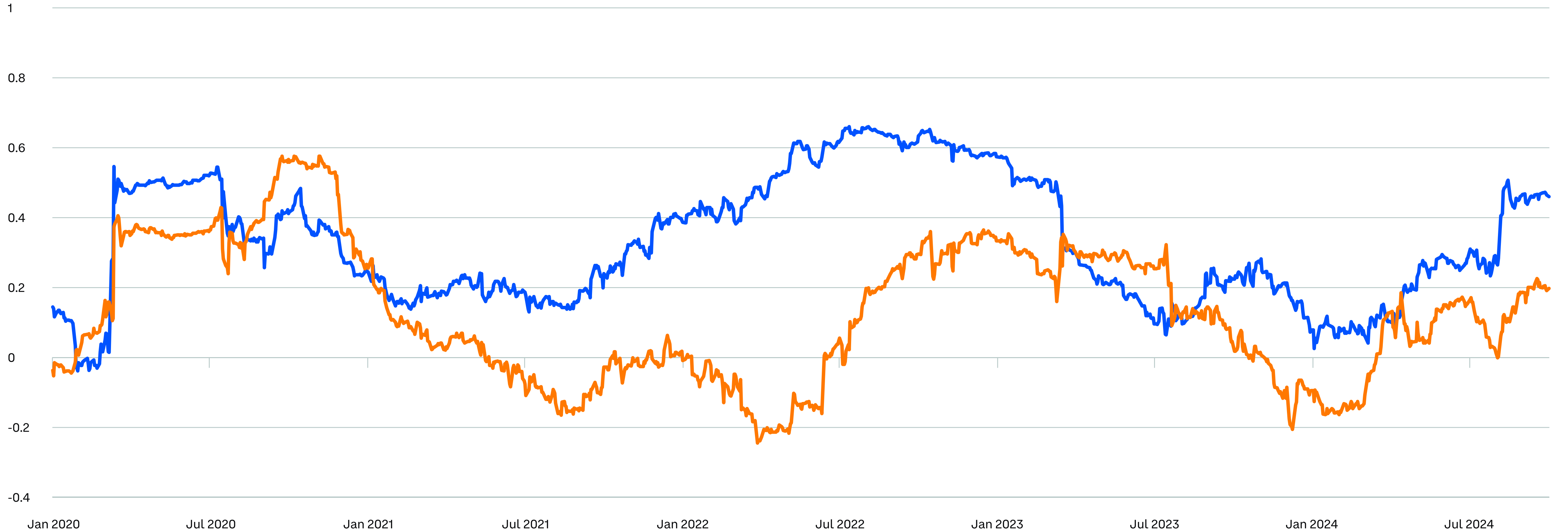
Correlations Matrix

	BTC/USD	ETH/USD	SPX	GOLD	SILVER	CRY	COPPER	MOVE	DXY	VIX	US 2Y	US 10Y	US AGG
BTC/USD	1.00	0.86	0.43	0.20	0.25	0.09	0.06	-0.01	-0.04	-0.45	0.12	0.16	-0.10
ETH/USD	0.86	1.00	0.51	0.30	0.32	0.11	0.07	-0.03	0.06	-0.51	0.16	0.17	-0.10
SPX	0.43	0.51	1.00	0.40	0.57	0.38	0.55	-0.30	0.04	-0.82	0.24	0.11	0.03
GOLD	0.20	0.30	0.40	1.00	0.84	0.34	0.37	-0.15	-0.29	-0.32	-0.24	-0.30	0.34
SILVER	0.25	0.32	0.57	0.84	1.00	0.45	0.58	-0.18	-0.28	-0.46	-0.11	-0.20	0.28
CRY	0.09	0.11	0.38	0.34	0.45	1.00	0.54	-0.28	-0.11	-0.35	0.23	0.16	-0.08
COPPER	0.06	0.07	0.55	0.37	0.58	0.54	1.00	-0.20	-0.31	-0.44	0.05	-0.09	0.22
MOVE	-0.01	-0.03	-0.30	-0.15	-0.18	-0.28	-0.20	1.00	-0.16	0.46	-0.23	-0.27	0.13
DXY	-0.04	0.06	0.04	-0.29	-0.28	-0.11	-0.31	-0.16	1.00	-0.15	0.57	0.62	-0.70
VIX	-0.45	-0.51	-0.82	-0.32	-0.46	-0.35	-0.44	0.46	-0.15	1.00	-0.22	-0.21	0.05
US 2Y	0.12	0.16	0.24	-0.24	-0.11	0.23	0.05	-0.23	0.57	-0.22	1.00	0.81	-0.75
US 10Y	0.16	0.17	0.11	-0.30	-0.20	0.16	-0.09	-0.27	0.62	-0.21	0.81	1.00	-0.96
US AGG	-0.10	-0.10	0.03	0.34	0.28	-0.08	0.22	0.13	-0.70	0.05	-0.75	-0.96	1.00

Since 2020, bitcoin has an average correlation of just 0.33 with the S&P 500 and 0.13 with gold, highlighting its powerful role as a portfolio diversifier.

Rolling 90-day Correlations Against BTC (Log Normalized Daily Returns)

● S&P 500 ● Gold



Sources: Bloomberg, Coinbase.

Spotlight

Surging Stablecoins

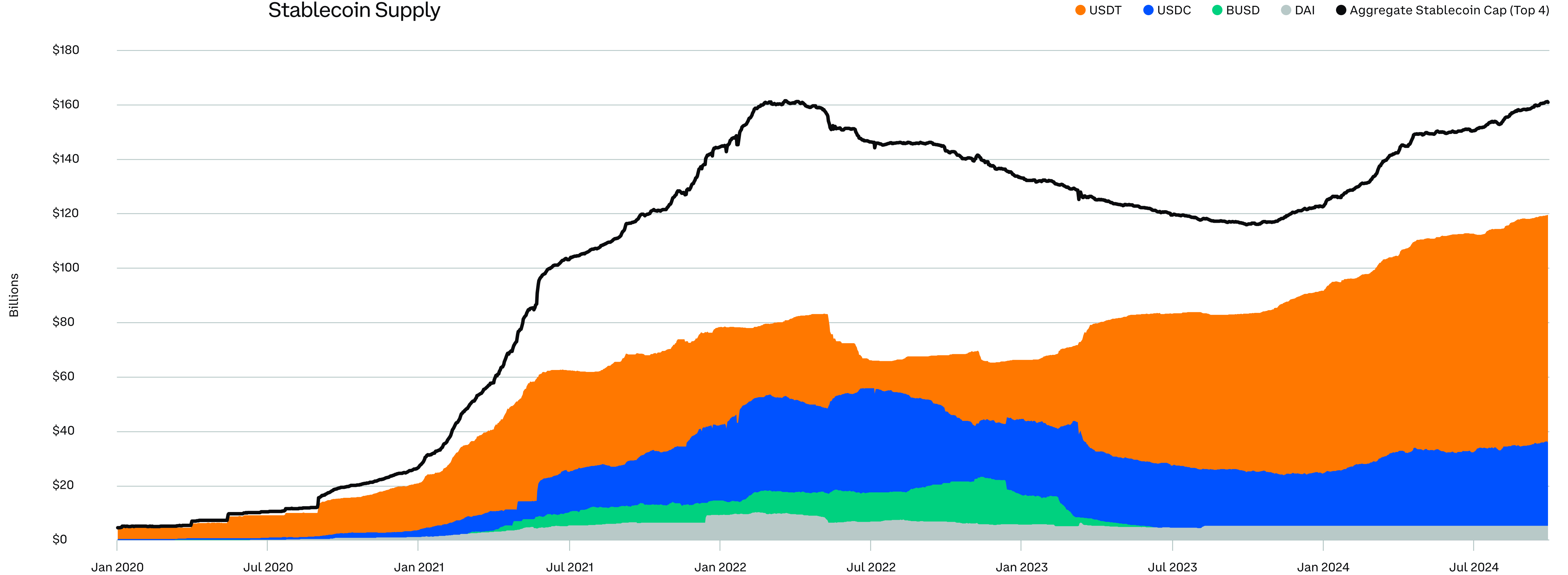
The third quarter of 2024 saw several milestones for stablecoins. Total stablecoin market cap hit a new all-time high of nearly \$170 billion, and new rules came into force in the European Union under the Markets in Crypto-Assets Regulation (MiCA).

Both events reflect the growing mainstream adoption of stablecoins and recognition of the advantages they can offer, including speed, cost, and security. Stablecoins are increasingly being used to construct robust payment systems on crypto rails, facilitating remittance payments and streamlining cross-border transactions.

The integration of stablecoins into existing payment systems is just one example of how crypto is increasingly being used in the real economy.

The supply of stablecoins hit an all-time high in Q3 as market participants continue to utilize them for a variety of new and existing use cases.

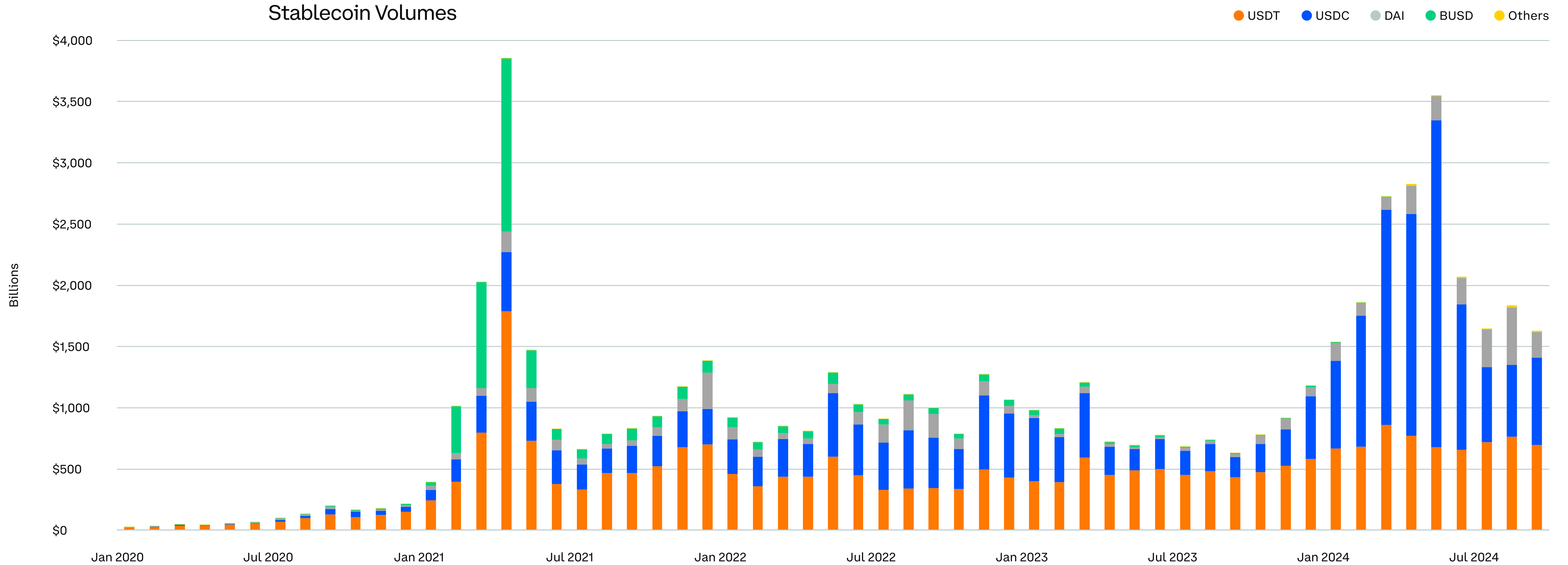
Stablecoin Supply



Source: Glassnode.

Stablecoins are digital currencies that are designed to maintain a constant or “stable” value. To achieve a stable value, many hold reserve assets denominated in US dollars or other fiat currency at a fixed rate (typically 1:1). Such fiat-backed stablecoins make up the vast majority of the overall stablecoin market. An important metric to consider when assessing stablecoins is the amount and nature of reserve assets they hold.

Stablecoin volumes have soared to nearly \$20 trillion YTD.



Source: Artemis.

Measures the amount of stablecoins transferred onchain in US dollars.

Spotlight

Leveling up L2s

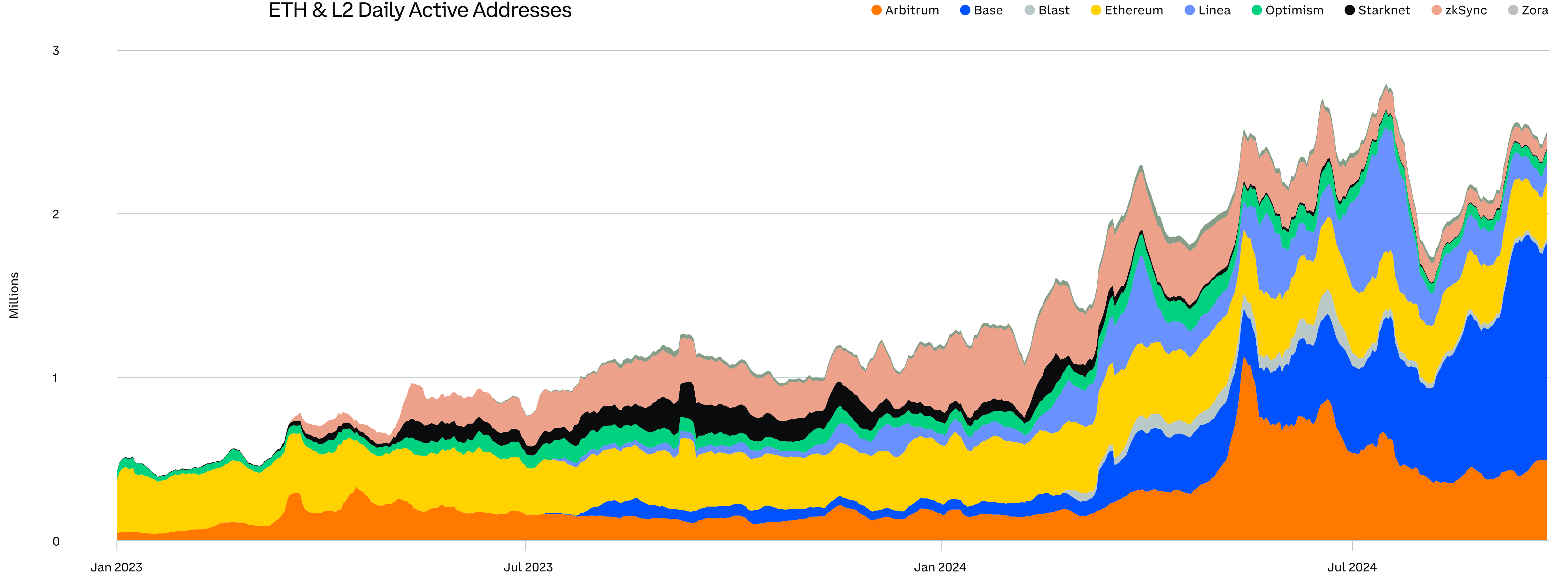
As we start the fourth quarter, the price of ether is close to where it was when the year began. But looking beyond price reveals a rapidly growing Ethereum ecosystem, led by the strength of new and innovative Layer 2s.

The number of active users and the volume of transactions have both risen sharply as developers and end-users continue to migrate onchain. Meanwhile, fees on L2s have dropped dramatically following Ethereum's Dencun upgrade.

While it remains to be seen how activity will shake out between the Ethereum L1 and the various L2s, one thing is clear: L2s are bringing more users, more activity, and more innovation to the world of Ethereum.

Daily active addresses in the Ethereum ecosystem have risen sharply this year, led by a pickup in L2s, with Base leading the way.

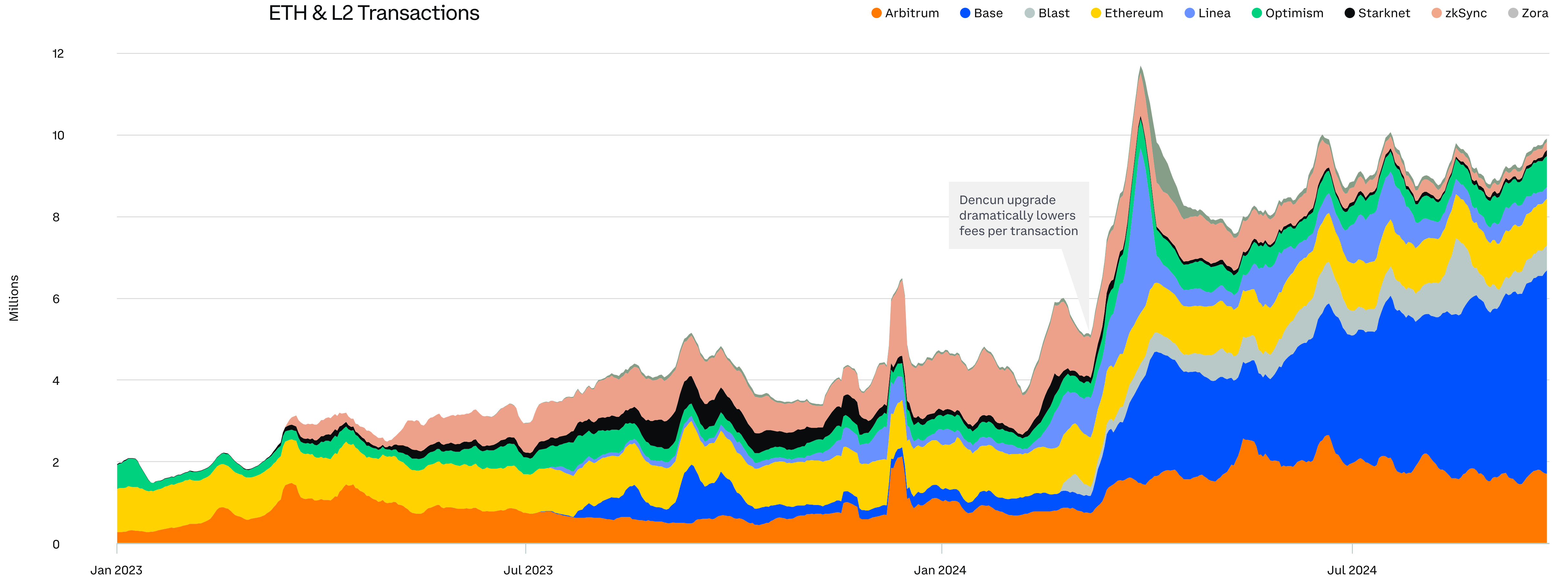
ETH & L2 Daily Active Addresses



Sources: growthpie.xyz, Coinbase.

Daily active addresses measures the number of distinct addresses that interacted with a chain and is one of the metrics that can help gauge the overall size of a chain's user base.

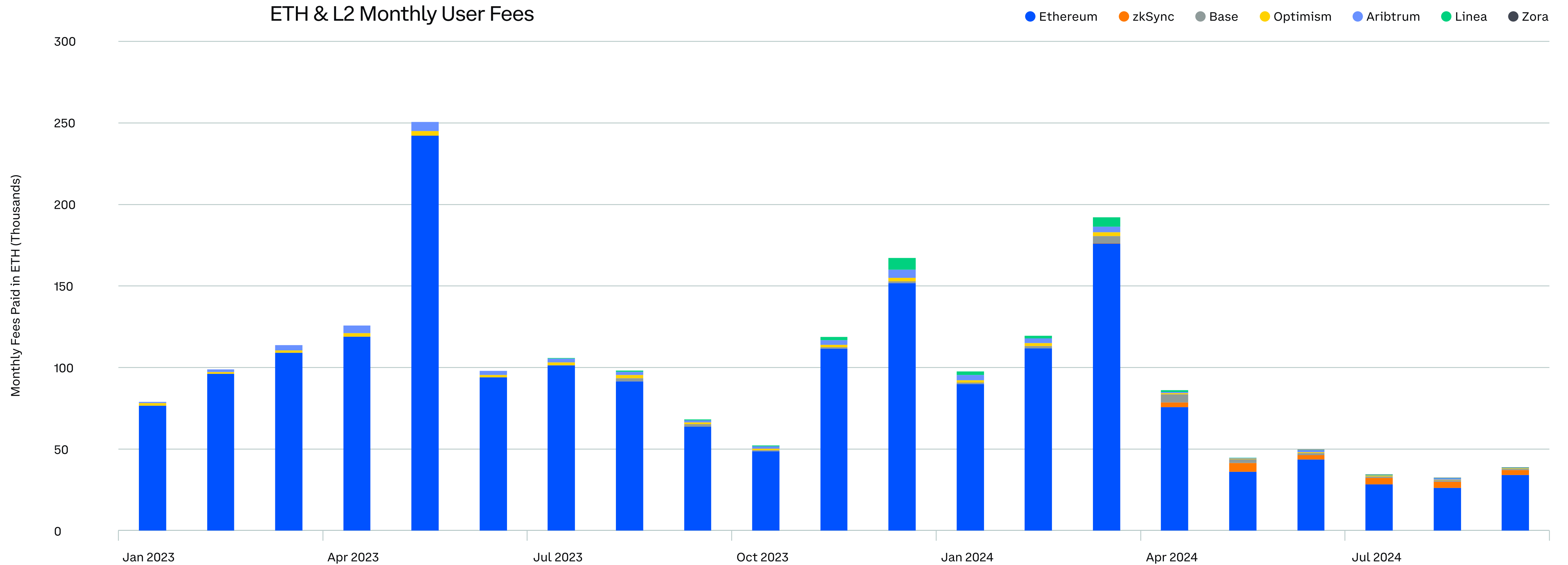
The number of daily transactions in the Ethereum ecosystem has increased 5x since the start of 2023, as new L2s and use cases have flourished.



Sources: growthpie.xyz, Coinbase.

The number of transactions processed on a blockchain is another important metric to measure usage. This metric attempts to capture only smart contracts, not system transactions.

Total fees paid have fallen dramatically even as activity has soared, after Ethereum's Dencun upgrade in March 2024 drastically reduced fees per transaction on L2s.



02 Bitcoin

Bitcoin (BTC) is the world's first widely adopted cryptocurrency. Note that bitcoin itself is distinct from the Bitcoin network on which the token is transacted. The network is what allows secure and seamless peer-to-peer transactions on the internet through a blockchain. The Bitcoin blockchain is a public ledger that contains the history of every transaction ever made using bitcoin. BTC is decentralized: any two people, anywhere in the world, can send bitcoin to each other without the involvement of a bank, government, or other institution.

Developer(s)

Bitcoin was created by Satoshi Nakamoto, a pseudonymous person or team who outlined the technology in a 2008 white paper.

Reference price

Bitcoin Reference Rate (BRR) -
CME CF Benchmark Reference Rate

Bloomberg Ticker

XBT Currency

Circulating Supply

19.8 mn

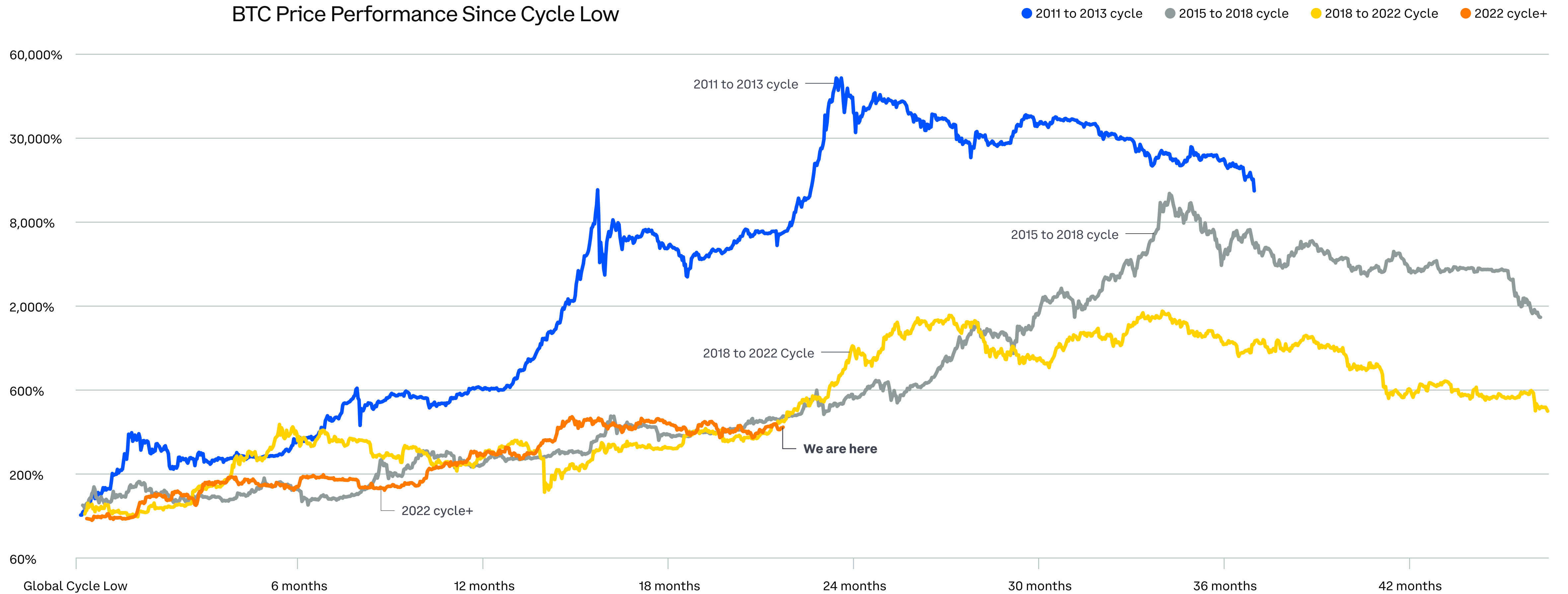
% Supply in Circulation

94%

Inflation Rate

0.82%

The current BTC cycle is closely tracking both the 2015-2018 and 2018-2022 cycles, which ended with total returns of nearly 2,000% and 600% respectively.

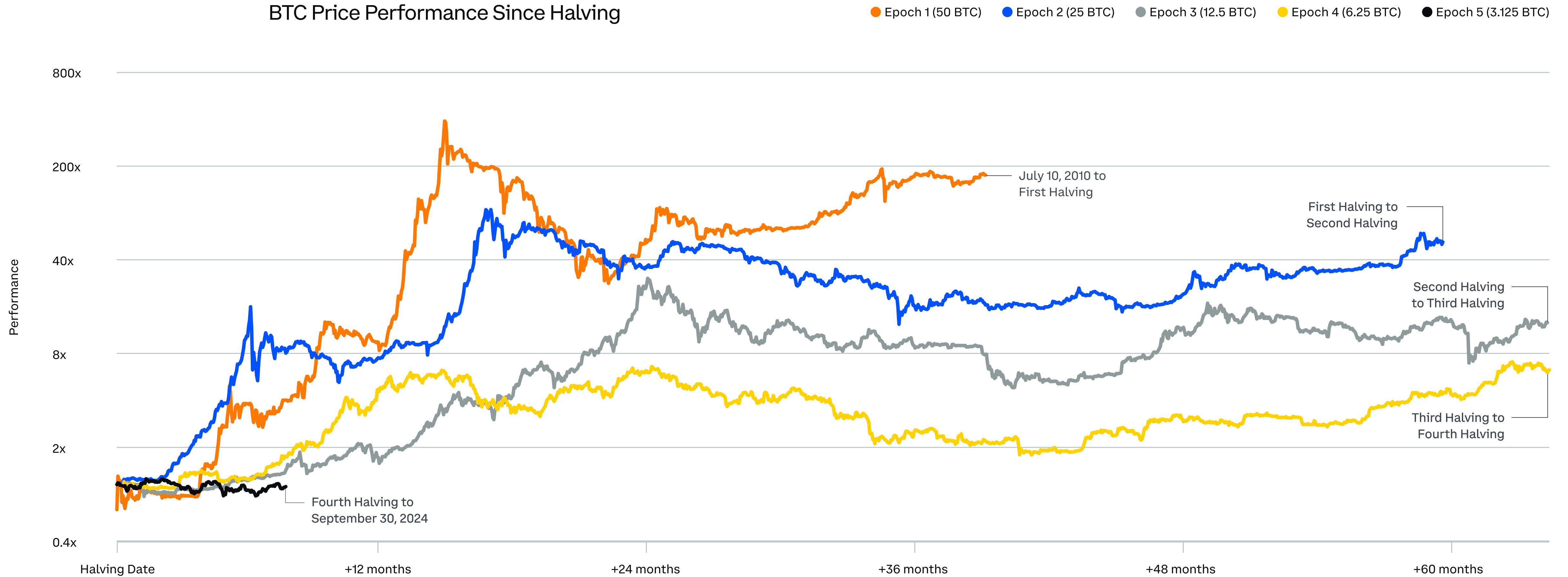


Source: Glassnode.

Bitcoin has completed four cycles that each included both bull and bear markets. In this chart, we see how the current market cycle, which began in 2022, compares to the previous cycles. Past performance does not indicate future results.

BTC performance since the fourth Halving most closely resembles performance after the third Halving, when prices went sideways for several months before moving sharply higher within a year from the Halving.

BTC Price Performance Since Halving

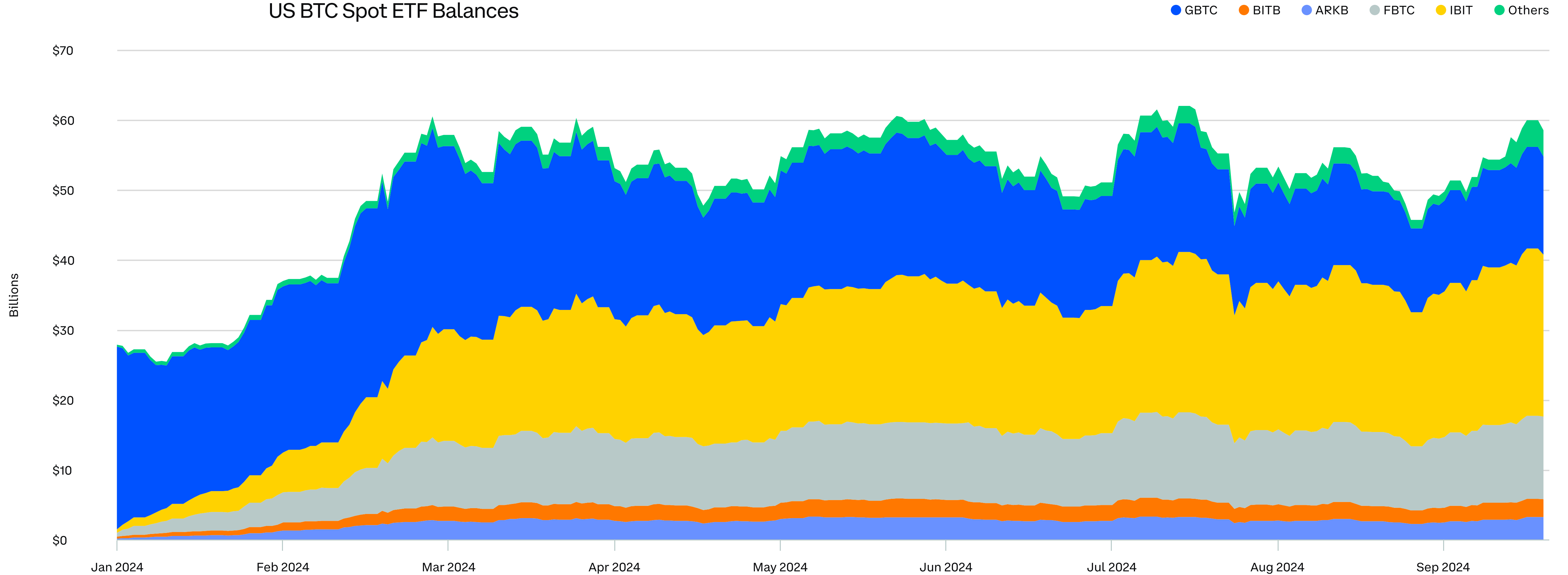


Source: Glassnode.

This chart measures the total return of BTC during each of the Halving cycles, or epochs. Immediately following the Halvings, price tends to trade sideways — as it has during the six months since the April 2024 Halving. However, within 12 months following the first three Halvings, prices appreciated meaningfully. Following the first Halving, prices gained more than 1,000% in the first 12 months. Following the second Halving, prices gained 200% in the first 12 months. Following the third Halving, prices gained more than 600% in the first 12 months. Since the fourth Halving (black line) on April 19, 2024 the price of bitcoin has fallen 1.2%.

US spot BTC ETFs ended Q3 with nearly \$60 billion in AUM, just 9 months after launching.

US BTC Spot ETF Balances

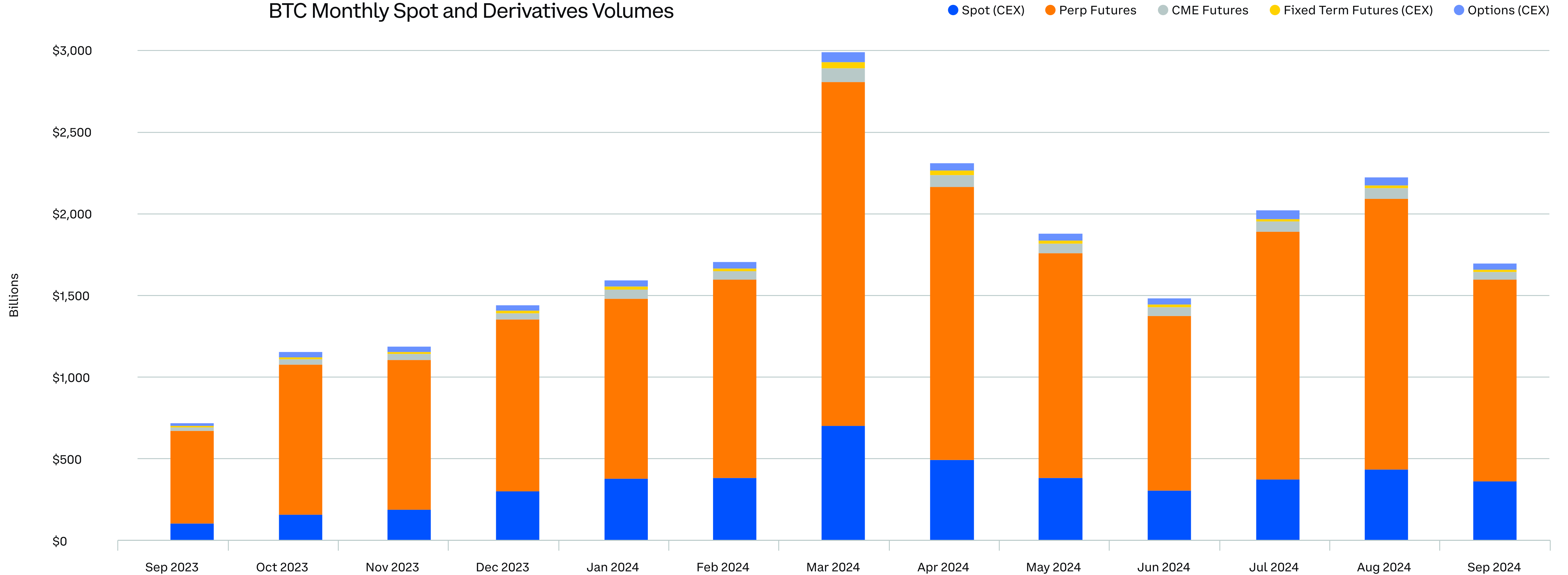


Source: Glassnode.

This metric offers the most recent balances of the leading Bitcoin ETFs traded in the U.S., typically reflecting holdings at the end of the previous trading day.

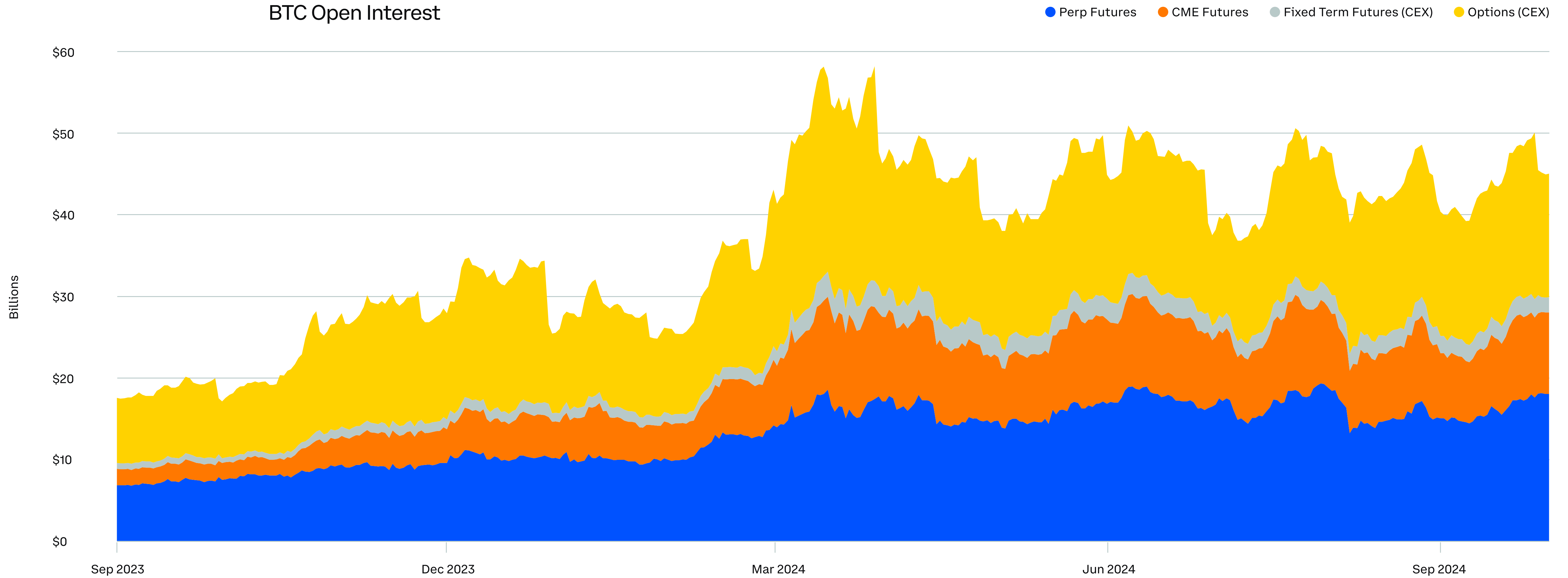
Crypto markets are increasingly liquid.
BTC volumes have averaged \$2T a month YTD, +76% from last year.

BTC Monthly Spot and Derivatives Volumes



Sources: CoinMetrics, Glassnode, Coinbase.

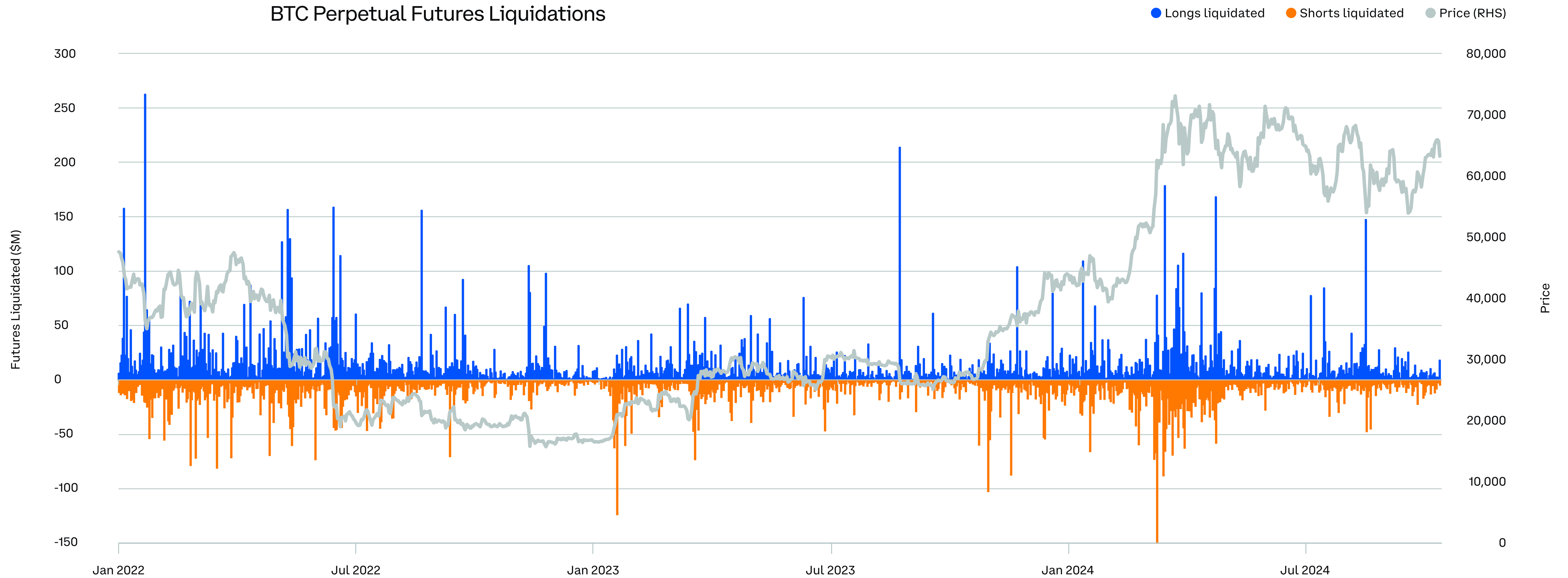
Open interest in bitcoin derivatives averaged \$44 billion in Q3 2024.



Sources: CoinMetrics, Glassnode, Coinbase.

Perpetual futures are not available to trade for US investors.

BTC positioning looks cleaner after significant long liquidations related to the unwind of short JPY carry trades in early August 2024.



Source: Glassnode.

Liquidation occurs when an exchange forcefully closes a futures position due to a partial or total loss of the initial margin. Large liquidations can signal the top or bottom of a steep price move. Perpetual futures are not available to trade for US investors.

BTC Derivative Summary Stats

Q3 2024 Daily Averages

Futures volume
\$1.5B

Perp funding rate
4.1%

Futures open
interest
\$27.4B

Options open
interest
\$16.2B

Q2 2024 Daily Averages

Futures volume
\$1.4B

Perp funding rate
6.8%

Futures open
interest
\$28.4B

Options open
interest
\$16.7B

Change from Q2

Futures volume
+6%

Perp funding rate
-41%

Futures open
interest
-4%

Options open
interest
-3%

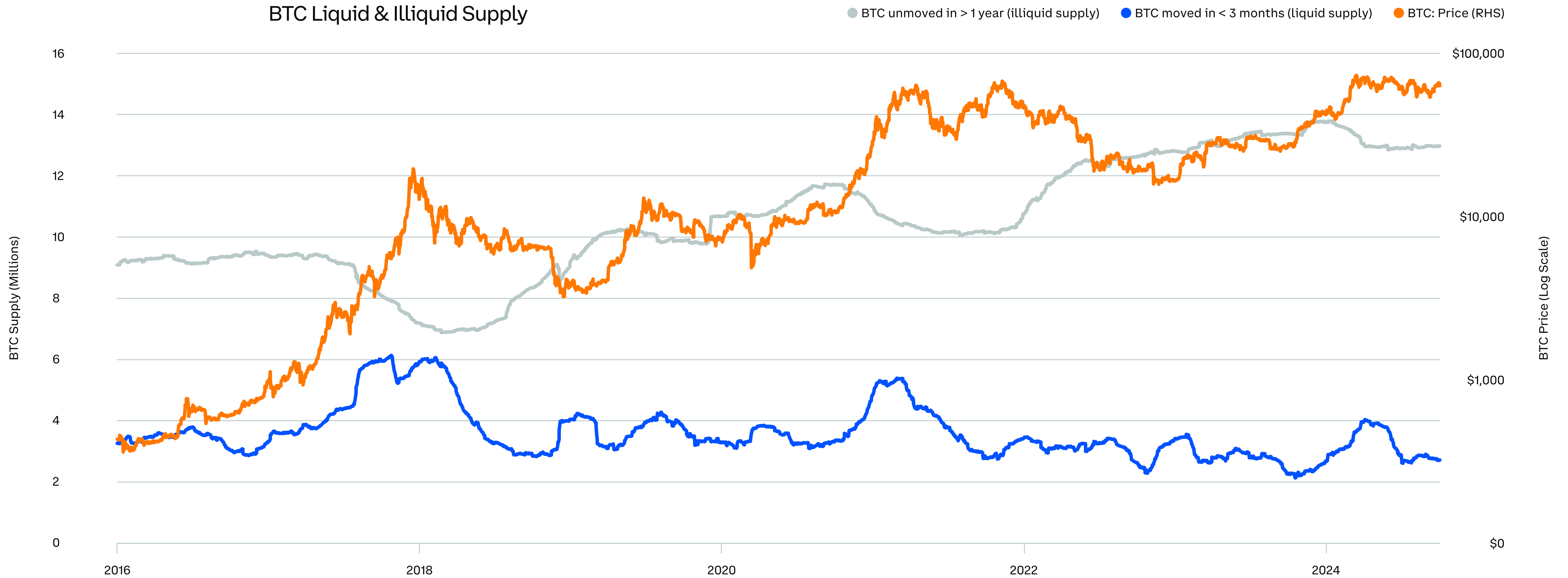
BTC Traditional Futures Specs

Exchange	Size of Large BTC Contract	Size of Small BTC Contract	Trading Hours
Coinbase Derivatives Exchange	1 BTC	0.01 BTC	Sunday – Friday 6 pm – 5 pm ET
CME	5 BTC	0.1 BTC	Sunday – Friday 6 pm – 5 pm ET
Deribit	N/A	\$10 USD	24/7

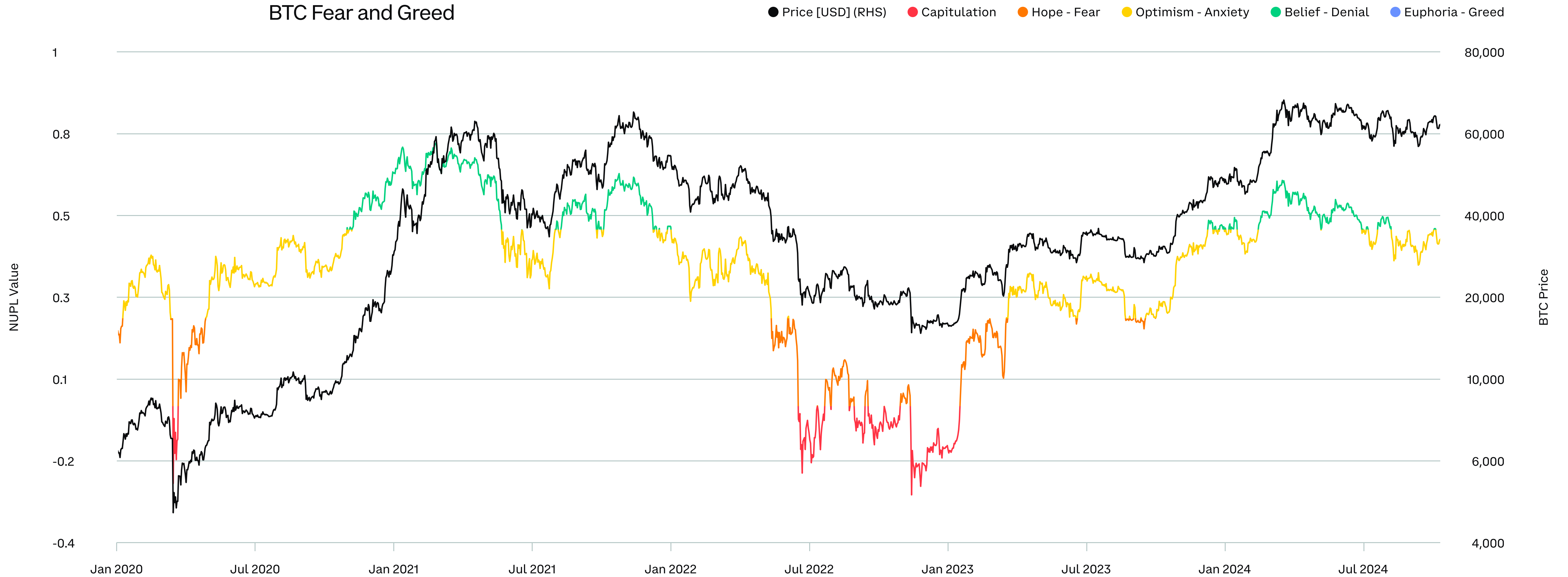
Source: Glassnode.

Perpetual futures are not available to trade for US investors.

The size of the liquid and illiquid supplies of BTC has remained fairly static throughout Q3.



As markets have traded sideways, the pendulum has swung away from greed and toward fear, perhaps laying the groundwork for the next rally.



Source: Glassnode.

This chart measures investor sentiment by looking at Net Unrealized Profit/Loss (NUPL), which is the difference between relative unrealized profit and relative unrealized loss. The labels are designed to capture the sentiment of investors with different perspectives. Since markets are unpredictable, each phase is described using two opposite terms. These phases follow traditional market cycles, where recovering from a deep bear market often progresses from Capitulation → Hope → Optimism → Belief → Euphoria. Conversely, a post-all-time high bear market might progress from Greed → Denial → Anxiety → Fear → Capitulation.

03 Ethereum

Ethereum (ETH) is an open-source blockchain platform that allows developers to run decentralized applications (dApps) and to create and deploy smart contracts. Ether (ETH) is the native cryptocurrency of the Ethereum network, and it has the second-largest market capitalization of any cryptocurrency, trailing only bitcoin.

Developer(s)

Ethereum was conceived by Vitalik Buterin, who published a white paper in 2014 before launching the project in 2015.

Reference price

Ether Reference Rate (ETHUSD_RR.) - CME CF
Benchmark Reference Rate

Bloomberg Ticker

XET Currency

Circulating Supply

119.9mn

Total Value Locked in DeFi

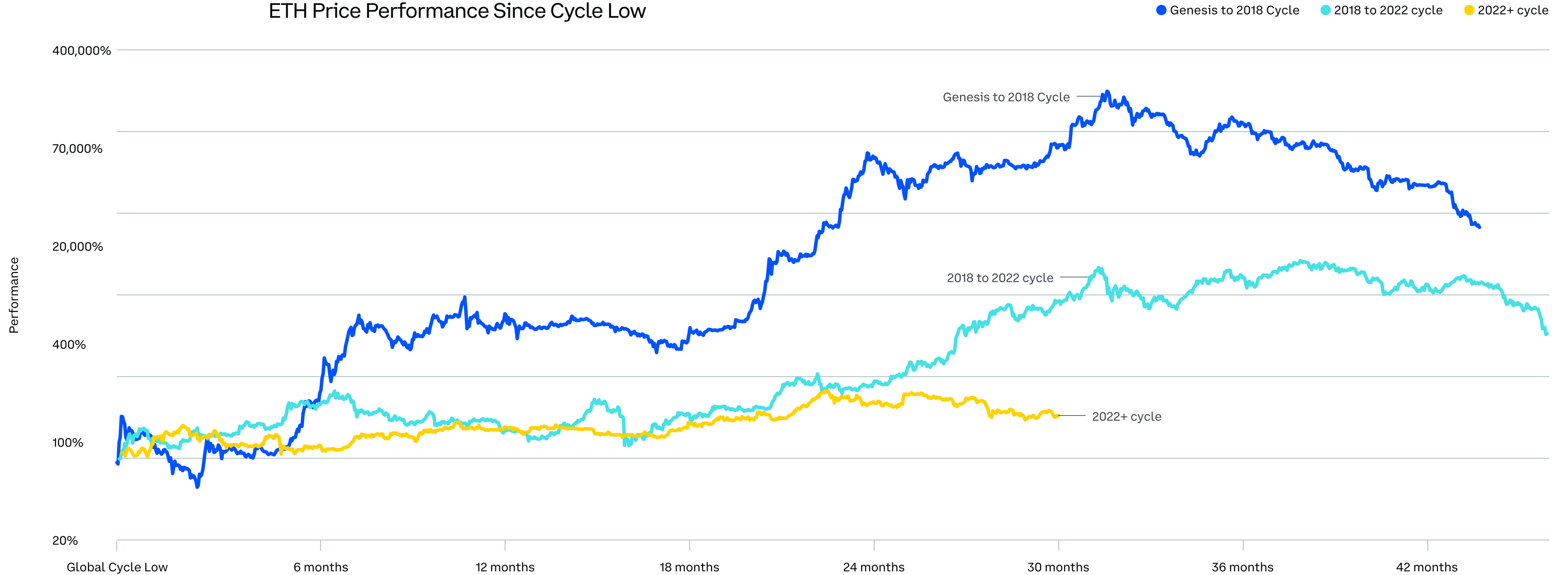
\$48.7B

Inflation Rate

0.35%

After closely tracking its 2018-2022 cycle, the current ETH cycle has started to diverge as the price of ether pulled back in Q3.

ETH Price Performance Since Cycle Low

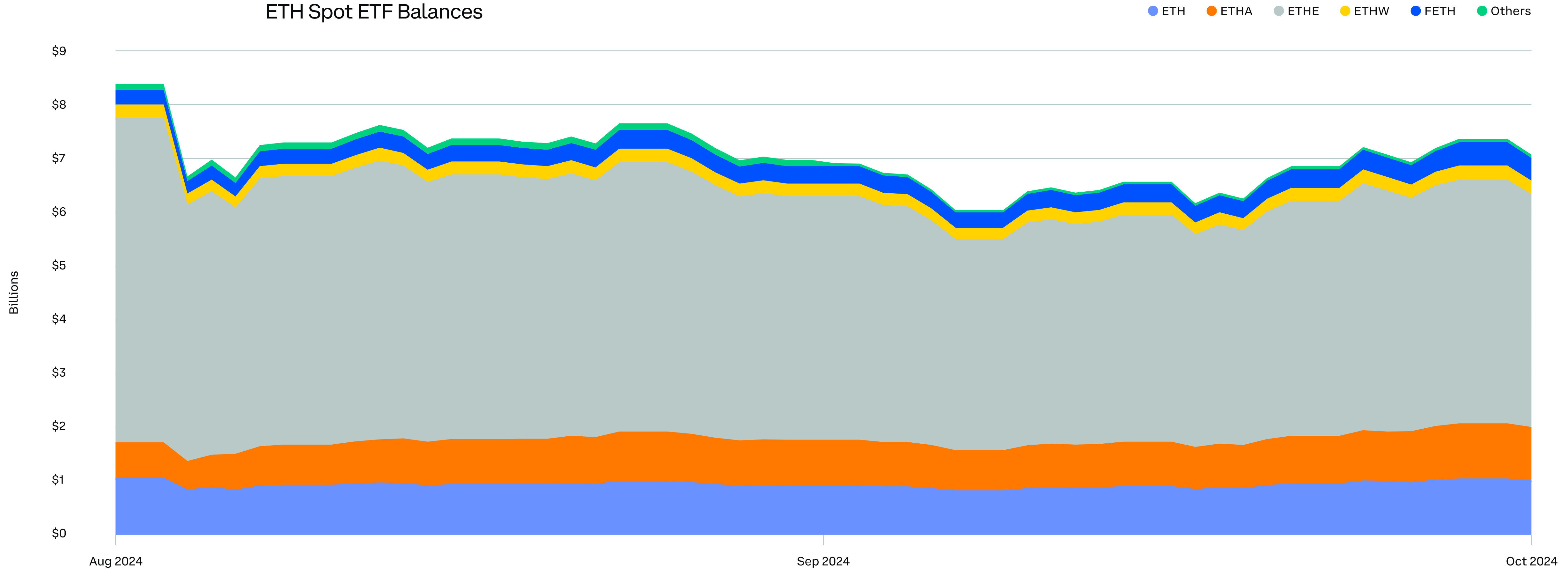


Source: Glassnode.

Ether has completed two cycles that each included both bull and bear markets. In this chart, we see how the current market cycle, which began in 2022, compares to the previous cycles. In the current cycle, ETH is up 125%+ since hitting its cycle low in November 2022. Past performance does not indicate future results.

US spot ETH ETFs ended Q3 with \$7.1 billion after launching in July.

ETH Spot ETF Balances

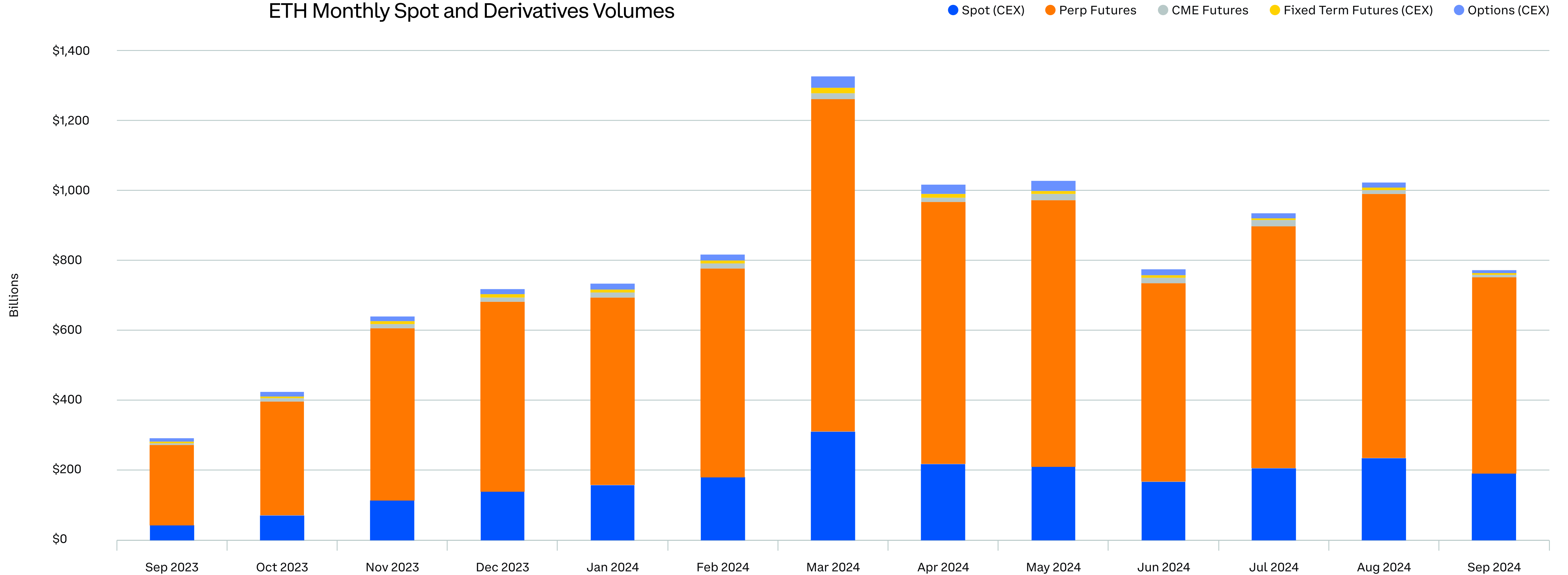


Source: Glassnode.

This metric offers the most recent balances of the leading Ethereum ETFs traded in the U.S., typically reflecting holdings at the end of the previous trading day.

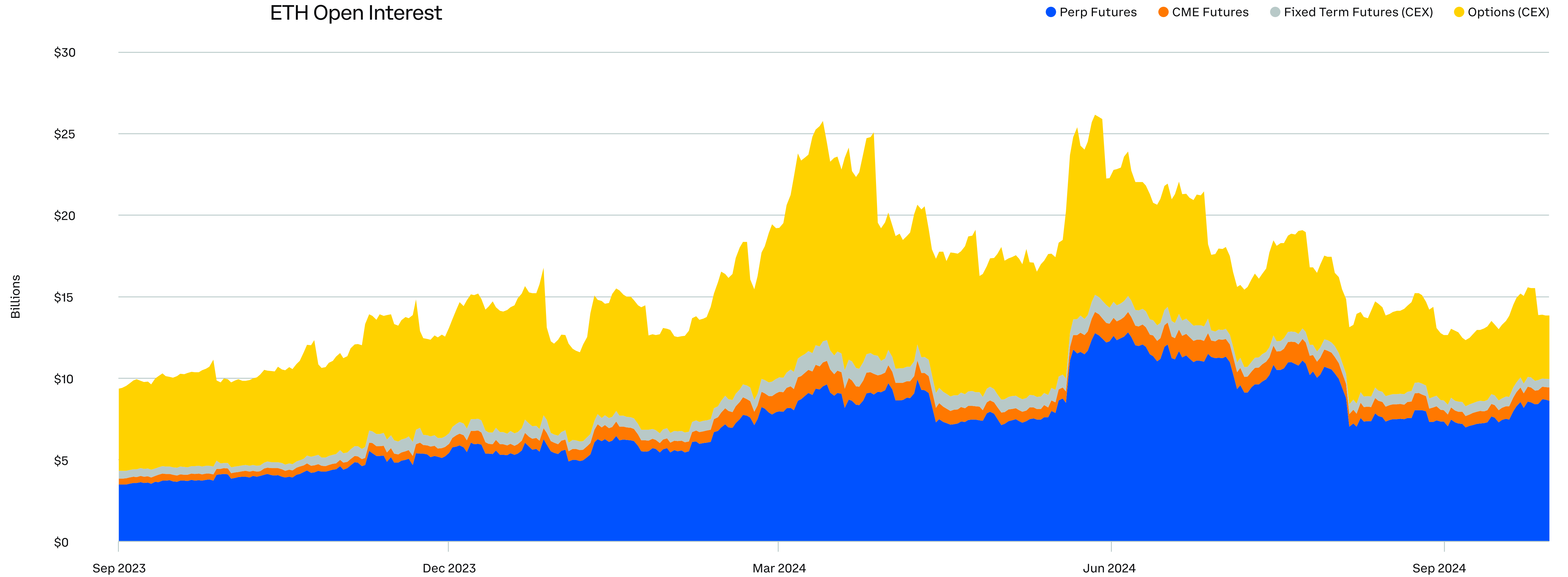
Crypto markets are increasingly liquid. Average monthly ETH volumes in 2024 are \$930 billion.

ETH Monthly Spot and Derivatives Volumes



Sources: CoinMetrics, Glassnode, Coinbase.

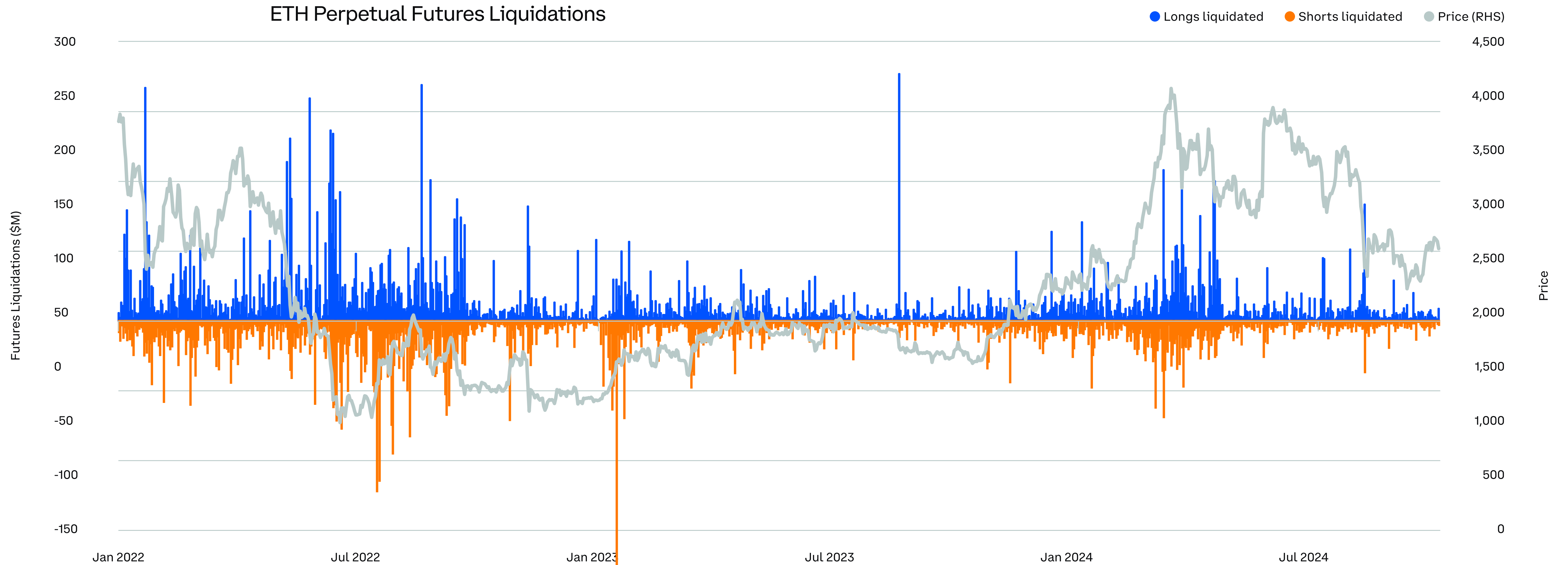
Open interest in ether derivatives averaged \$15 billion in Q4 2023.



Sources: CoinMetrics, Glassnode, Coinbase.

Perpetual futures are not available to trade for US investors.

A large spike in ETH long liquidations immediately followed the launch of spot ETH ETFs in the US and the unwind of the short JPY carry trade in early August.



Source: Glassnode.

Liquidation occurs when an exchange forcefully closes a futures position due to a partial or total loss of the initial margin. Large liquidations can signal the top or bottom of a steep price move. Perpetual futures are not available to trade for US investors.

ETH Derivative Summary Stats

Q3 2024 Daily Averages

Futures volume
\$687M

Perp funding rate
4.5%

Futures open
interest
\$10.2B

Options open
interest
\$4.9B

Q2 2024 Daily Averages

Futures volume
\$717M

Perp funding rate
9.1%

Futures open
interest
\$11.6B

Options open
interest
\$8.4B

Change from Q2

Futures volume
-4%

Perp funding rate
-50%

Futures open
interest
-13%

Options open
interest
-41%

ETH Traditional Futures Specs

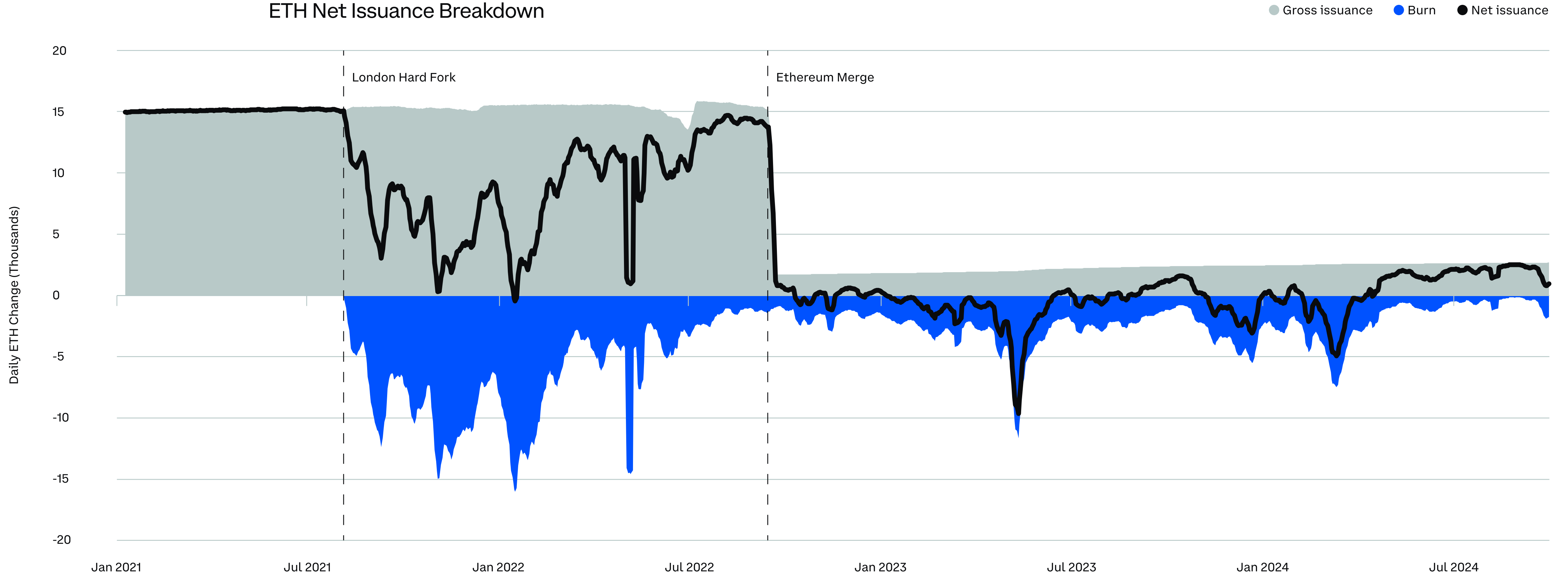
Exchange	Size of Large ETH Contract	Size of Small ETH Contract	Trading Hours
Coinbase Derivatives Exchange	10 ETH	0.1 ETH	Sunday – Friday 6 pm – 5 pm ET
CME	50 ETH	0.1 ETH	Sunday – Friday 6 pm – 5 pm ET
Deribit	N/A	\$1 USD	24/7

Source: Glassnode.

Perpetual futures are not available to trade for US investors.

ETH issuance continues to be net inflationary even though fees picked up in the tail end of Q3.

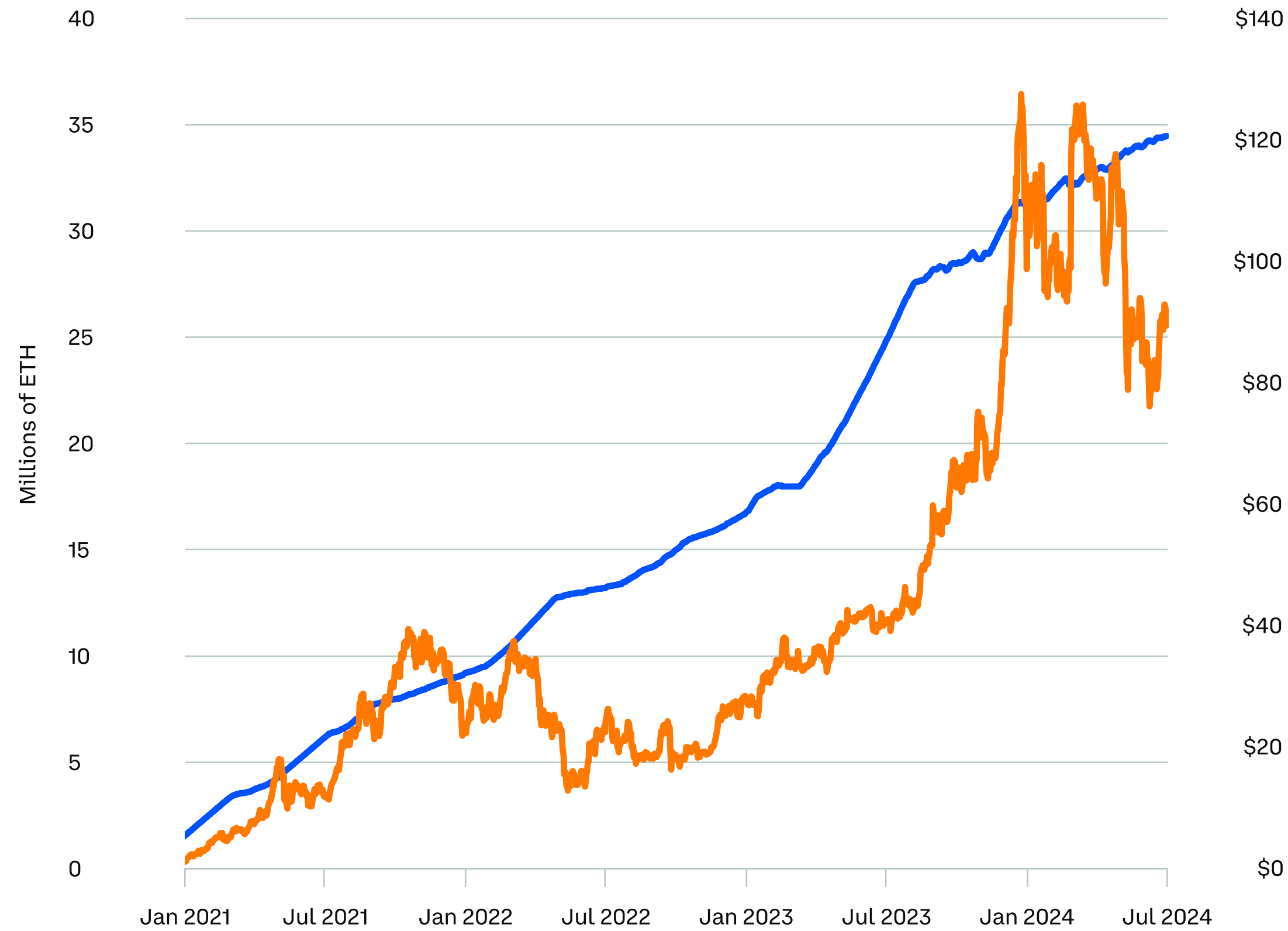
ETH Net Issuance Breakdown



The number of ETH staked hit a new all-time high in the third quarter as more holders looked to generate yield from their positions.

ETH Total Value Staked

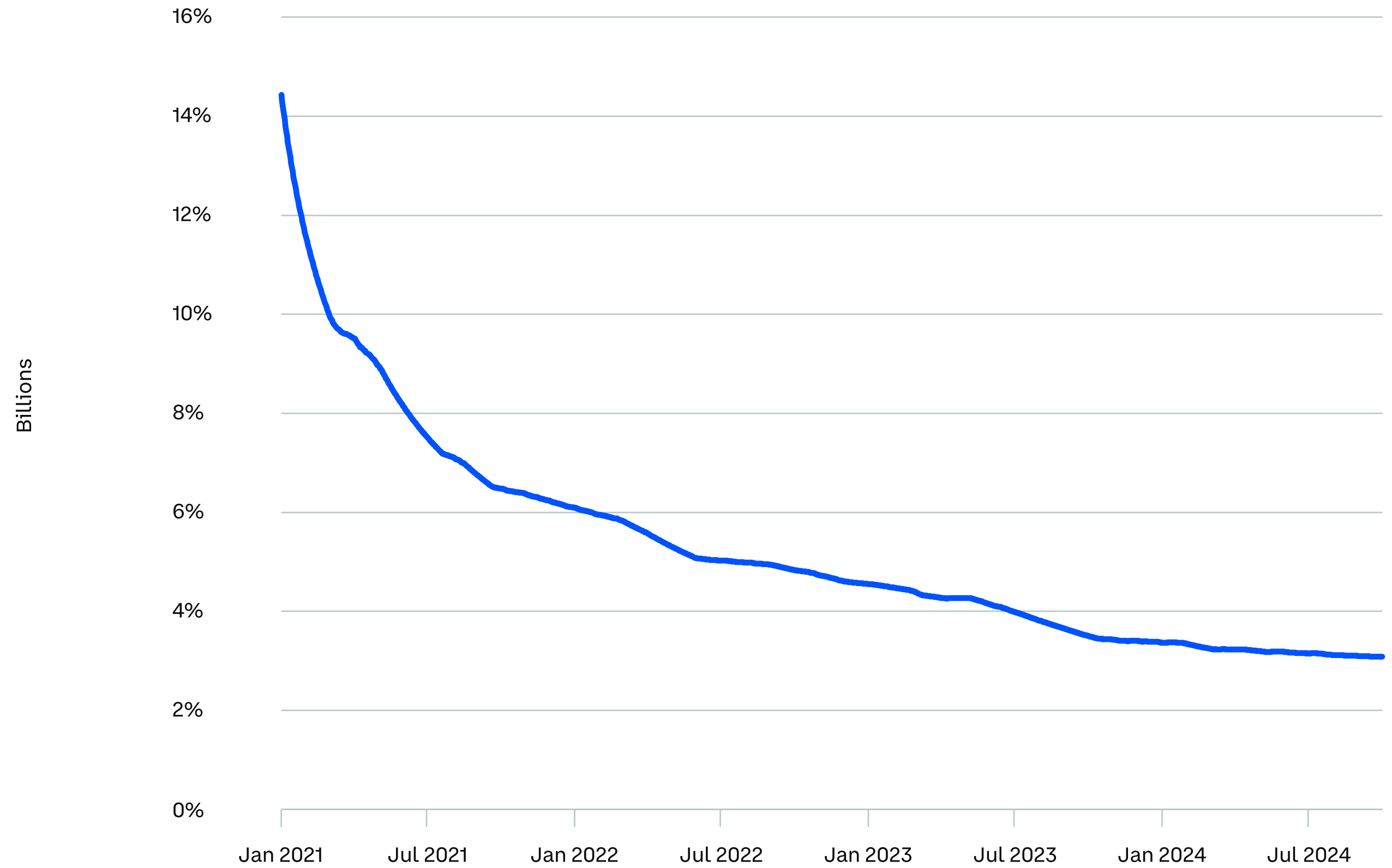
● # of ETH Staked ● Value of ETH Staked (RHS)



Source: Glassnode.

Staking is a feature of Proof of Stake blockchains in which token holders pledge their assets to support the network's security, in exchange for rewards in the form of additional tokens. In order to stake ETH, holders must pledge a minimum of 32 ETH and run a validator node.

ETH Staking Annual Yield

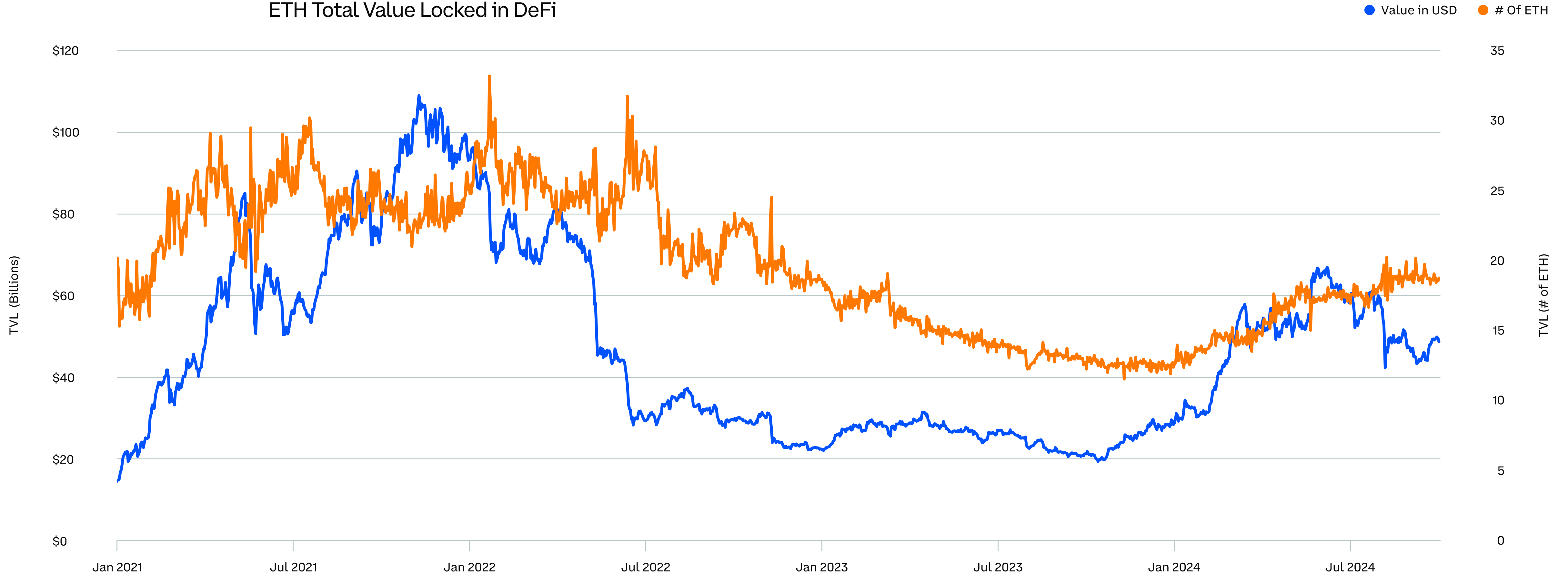


Source: Glassnode.

This chart reflects the ETH denominated annual return on a 32-ETH stake validator, with ETH issuance determined based on the number of validators participating in consensus.

The number of ETH locked in DeFi rose 11% in the third quarter.

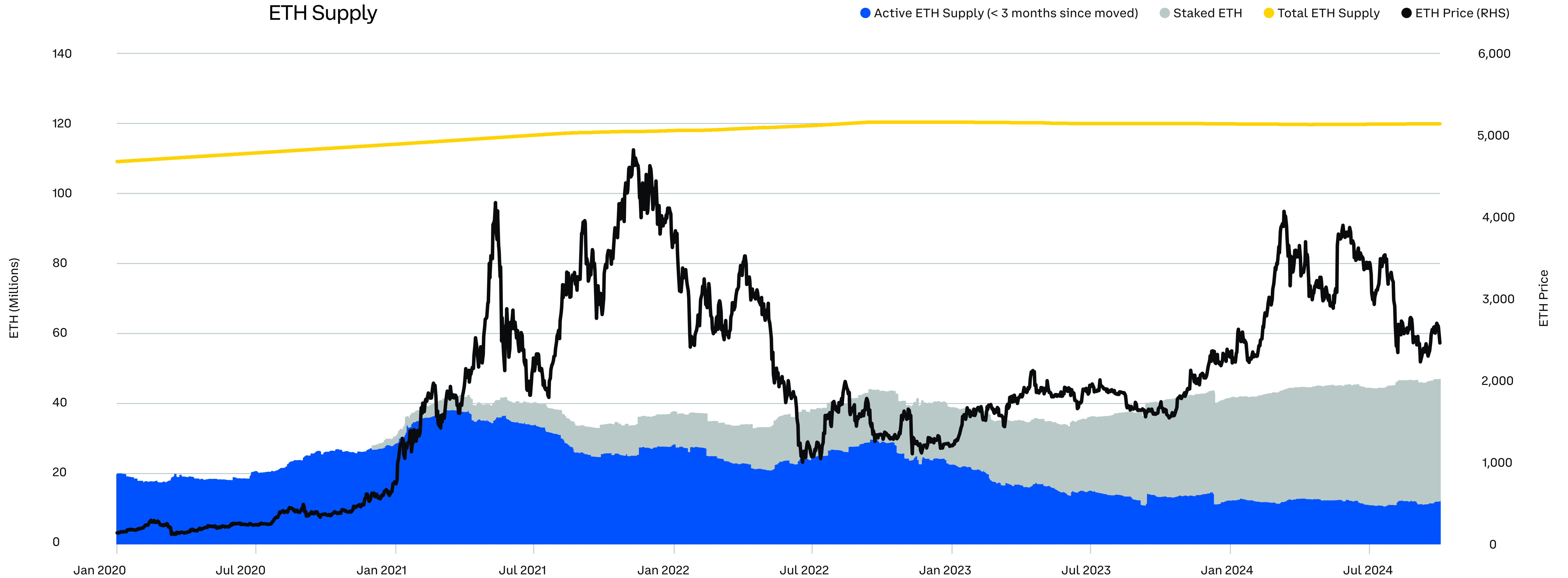
ETH Total Value Locked in DeFi



Source: Glassnode.

Total Value Locked (TVL) refers to the value of assets, including ETH, stablecoins, and alt coins, that are locked in smart contracts or deposited in decentralized applications on the Ethereum blockchain. TVL is a measure of financial activity and liquidity within the Ethereum ecosystem.

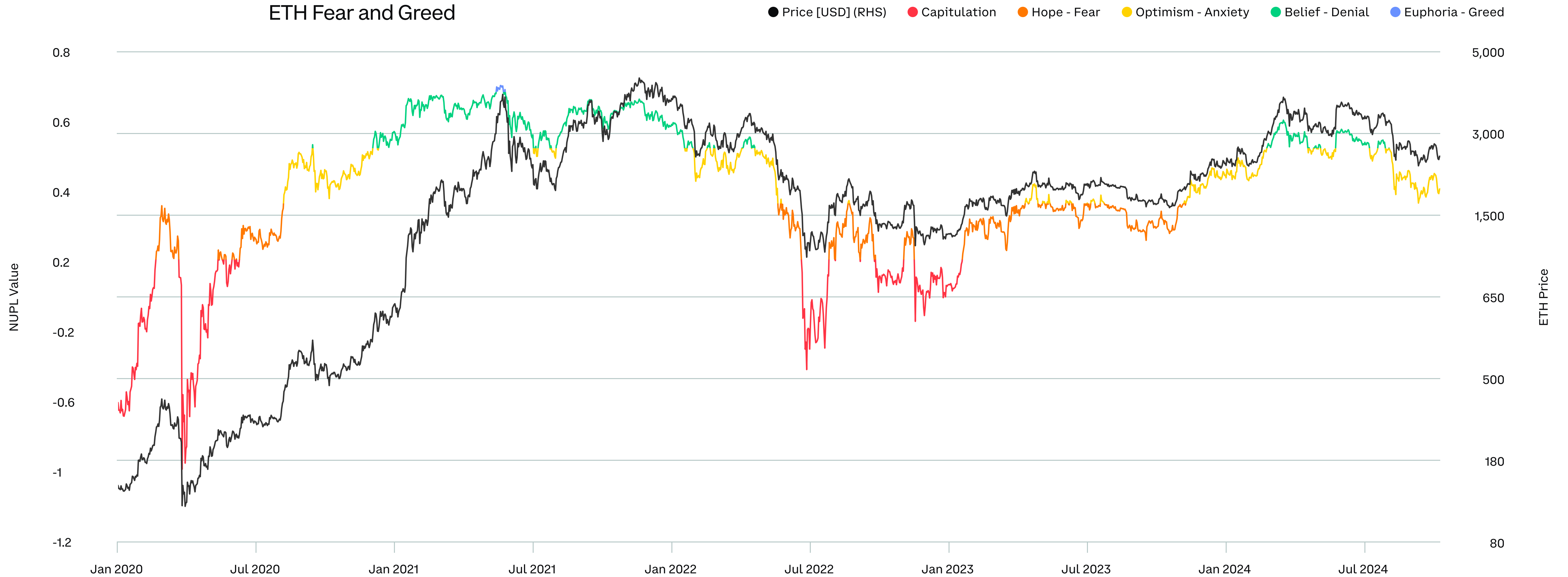
Staking has been a major liquidity sink for ETH.



Sources: Glassnode, Coinbase.

Active ETH supply is measured as the total amount of unstaked ETH held by accounts that were active in the previous three months.

As the price of ether has retreated, sentiment has swung away from greed and toward fear, perhaps laying the groundwork for the next rally.



Source: Glassnode.

This chart measures investor sentiment by looking at Net Unrealized Profit/Loss (NUPL), which is the difference between relative unrealized profit and relative unrealized loss. The labels are designed to capture the sentiment of investors with different perspectives. Since markets are unpredictable, each phase is described using two opposite terms. These phases follow traditional market cycles, where recovering from a deep bear market often progresses from Capitulation → Hope → Optimism → Belief → Euphoria. Conversely, a post-all-time high bear market might progress from Greed → Denial → Anxiety → Fear → Capitulation.

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