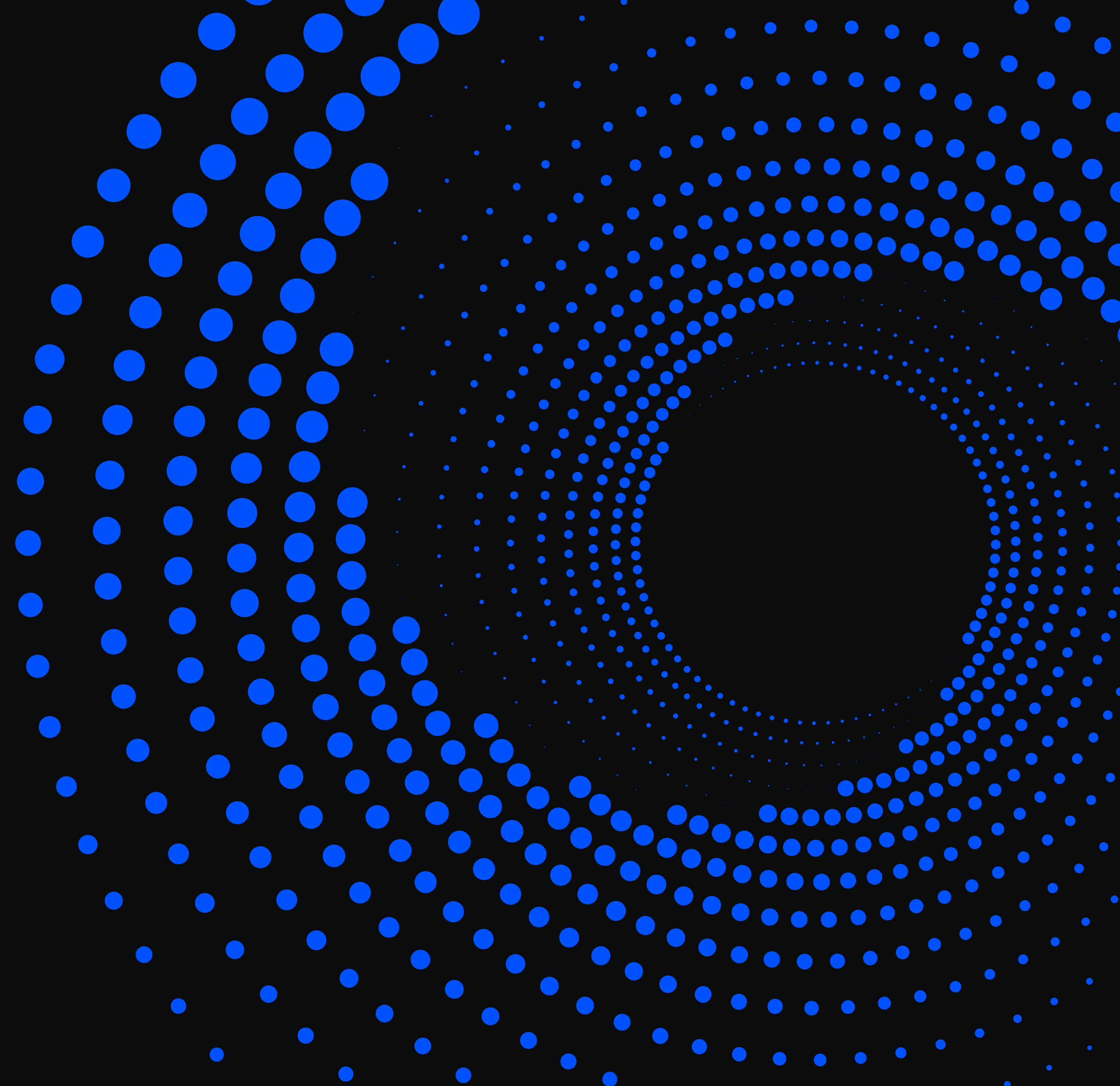


coinbase INSTITUTIONAL + glassnode

Q3 2024

# Guide to 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 June 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 onchain analytics and deep insights into the Bitcoin and decentralized finance (DeFi) markets. 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 Healthy and Growing Ecosystem

After a blockbuster first quarter that saw bitcoin prices hit all time highs on the back of record-shattering ETF inflows, crypto markets spent much of the second quarter in consolidation mode. We view the price correction as both healthy and a natural part of the current market cycle.

Looking beyond simple price movements reveals a very healthy crypto landscape. Trading volumes across spot and derivatives remain robust, new investors are entering the market, and progress is being made on the regulatory front. Meanwhile, onchain activity continues to accelerate as a myriad of users — from innovative startups to Fortune 500 companies — find compelling use cases for blockchain technology.

The Guide to Crypto Markets goes beyond the headlines and digs 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.

This quarter, for the first time, we're pleased to start the report with submissions from participants that frame the current environment. Each chart focuses on a metric that is critical to follow in the current market environment. In short, they are the 'most important' charts in crypto right now. We're grateful to the partners who shared their current thoughts.

In this third version of the Guide, we also spotlight three topics that are top-of-mind for many investors as we begin the second half of the year:

- [Gauging where we are in the market cycle](#)
- [Understanding how ETFs have altered the crypto trading and investment landscape](#)
- [Examining the state of onchain adoption and activity](#)

Following these sections, we dive deep into the metrics that matter most for bitcoin, ether, stablecoins, and more.

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



**David Duong**

Coinbase  
Head of Institutional Research



**James Check**

Glassnode  
Lead Analyst

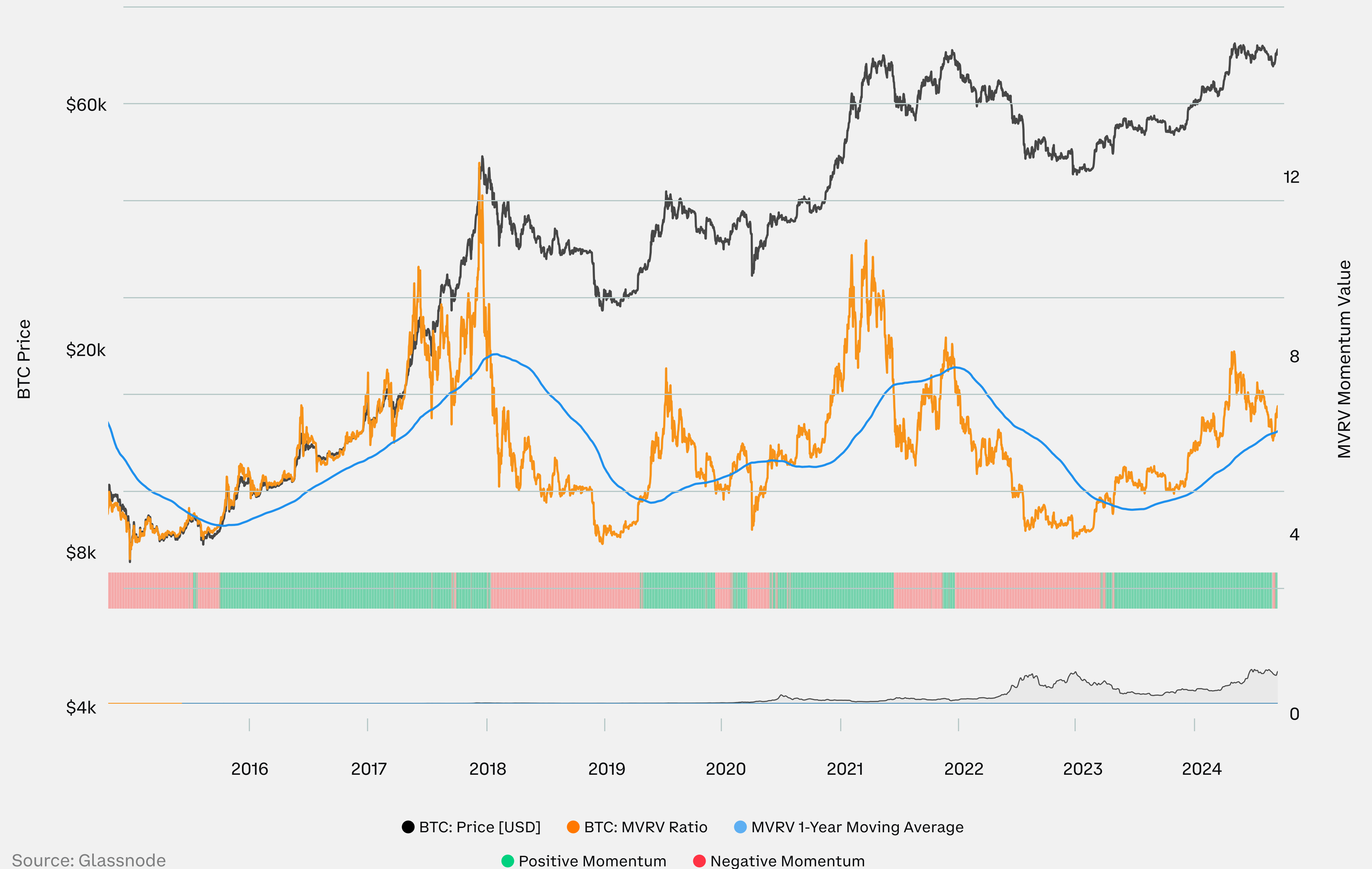
# Partner Focus Glassnode

MVRV Momentum is a tool that helps analysts monitor the resilience, strength, and direction of a market trend. It tracks the average unrealized profit multiple held by Bitcoin investors (MVRV), relative to its 365-day moving average.

Periods where MVRV trades above its 365d average are typically aligned with robust uptrends. Investors experience improving profitability, and often look to increase their position size during market corrections. Conversely, periods when MVRV breaks sharply below its 365d average often indicate that a large volume of coins have now fallen into an unrealized loss. This can create conditions of uncertainty amongst investors, and increases the likelihood of a move towards more conservative, risk-off decisions.

In early July, the MVRV ratio pulled back to, and found support near its 365d moving average. This occurred near the correction lows, and suggests that the 2024 uptrend remains intact, with investor profitability remaining positive.

**James Check, Lead Analyst, Glassnode**



# Partner Focus

## Coinbase

Something important we've observed is the decline in correlations among crypto assets in Q2, with coefficients currently ranging from 0.7 in the case of ETH to below 0.5 for some altcoins. In our view, this decoupling strengthens the case for owning crypto as a means of diversifying one's portfolio in a systematic way.

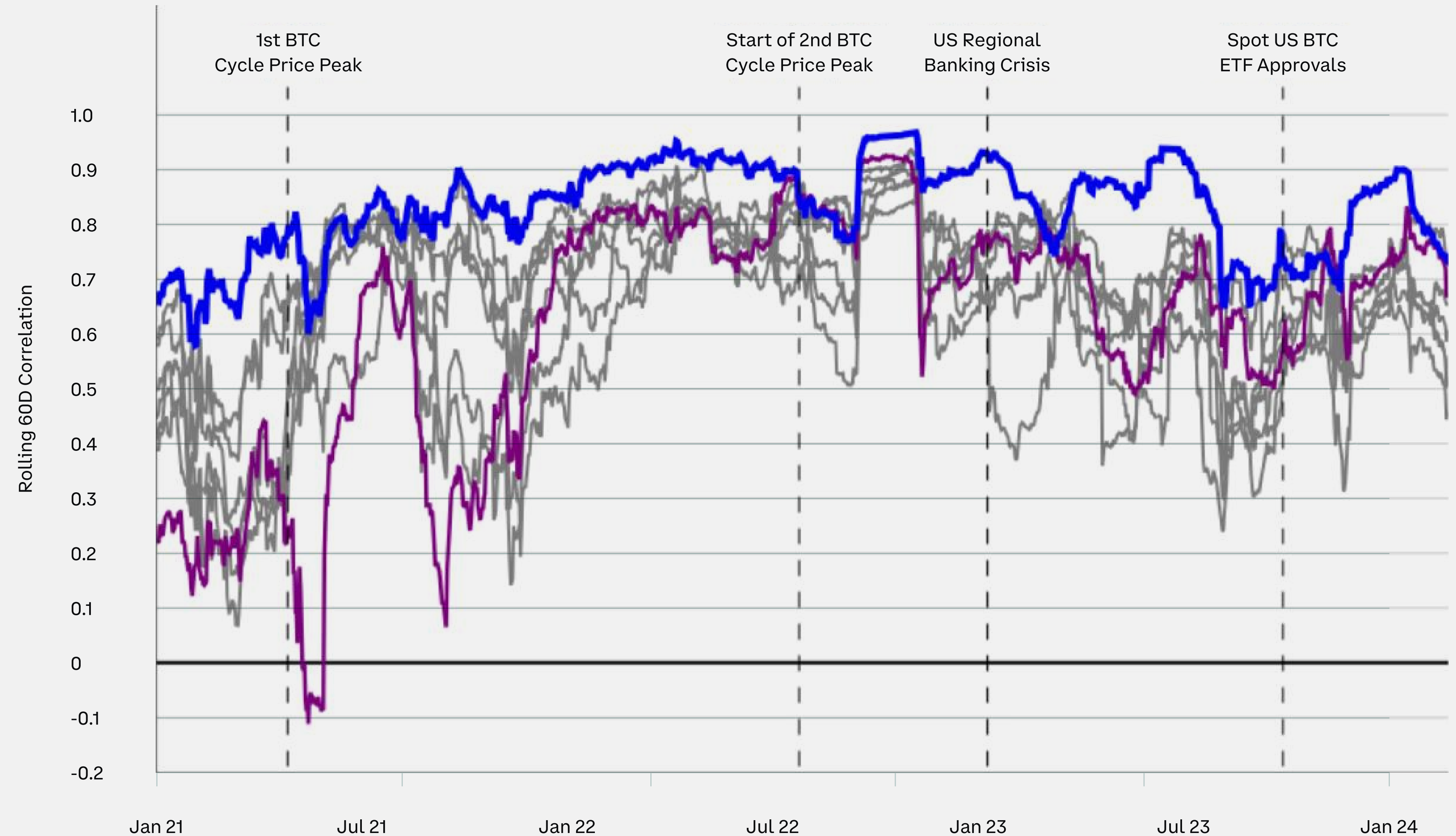
What's interesting is that the recent correlation drop doesn't resemble previous trends, insofar as it was not led by a period of BTC price appreciation. We think this change has been at least partially driven by the growing acceptance of the crypto asset class supporting a better understanding of the fundamental differences among tokens.

Also, the advent of spot ETH ETFs in the US may have catalyzed the recent correlation drop, although historically, major Ethereum events like the Merge or Shapella upgrades only resulted in one to three weeks of decreased correlation, well below the ongoing six week trend. This also underscores our belief that we are still in the mid-growth cycle as attention remains well diversified across the space.

We think that increasing regulatory clarity and rising institutional adoption may support a trend of further lowering cross-crypto correlations in the long term.

**David Duong, Head of Institutional Research, Coinbase**

Altcoin correlations against BTC have begun to taper off as protocol-specific catalysts begin to differentiate



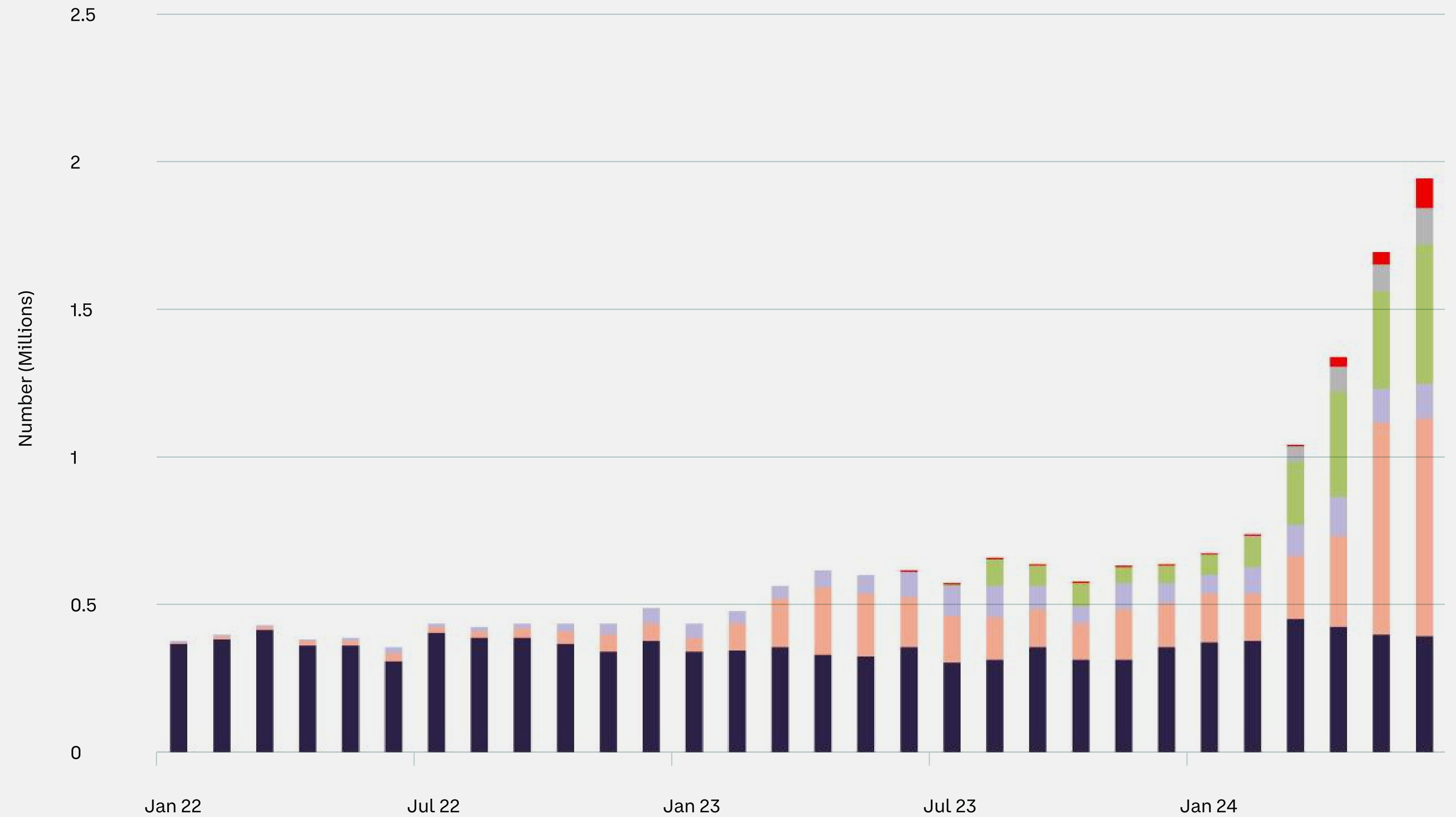
Sources: CoinMetrics and Coinbase.  
Correlations are based on log-normalized daily returns over a rolling 60 day period.

- XRP
- DOT
- AVAX
- MATIC
- ATOM
- LINK
- SOL
- ETH

# Partner Focus Grayscale

The Ethereum ecosystem today hosts roughly 2 million daily active users. Consistent with its modular approach to scaling, most of the increase in active users has occurred on Layer 2 networks like Arbitrum One. For the future, the big question will be how growing Layer 2 activity accrues value to ether, the Layer 1 asset.

**Zach Pandl, Head of Research, Grayscale**



\*Mainnet plus five largest L2s by TVL.  
 Source: Artemis, L2 Beat, Grayscale Investments.  
 Data as of June 30, 2024. For illustrative purposes only.

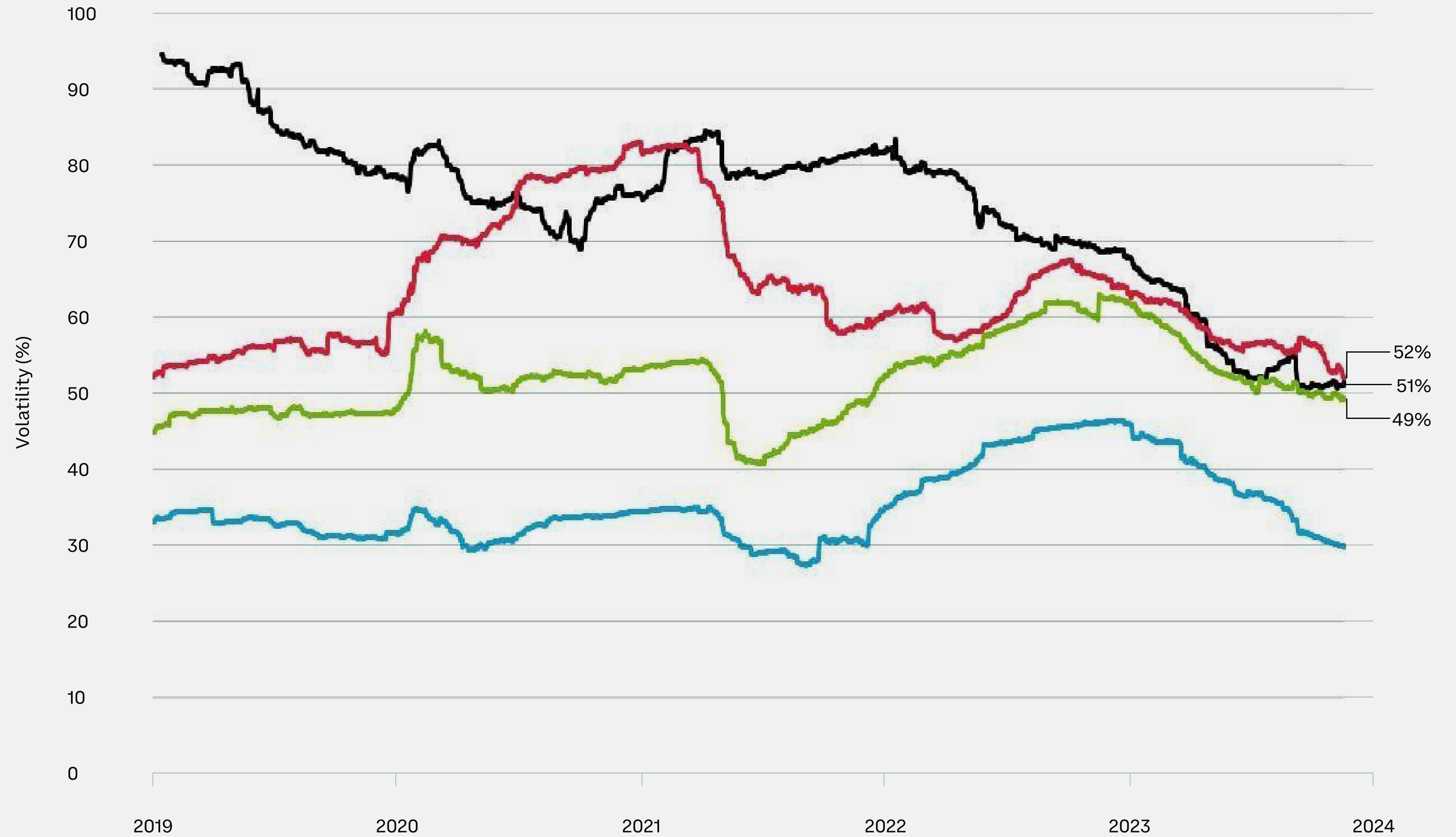
- Ethereum Mainnet
- Arbitrum One
- OP Mainnet
- Base
- Blast
- Mantle

# Partner Focus Tephra Digital

The perception? Digital assets volatility is too high for many investors.

The reality? Digital assets volatility has been comparable to some large, widely-held and well-known technology stocks.

## Tephra Digital



Note: Based on Bloomberg Galaxy Crypto Index (BGCI). Data through 7/15/24.  
Source: Data per Bloomberg.

● BGCI (Bloomberg Galaxy Crypto Index) ● AMZN (Amazon)  
● NVDA (Nvidia) ● TSLA (Tesla)

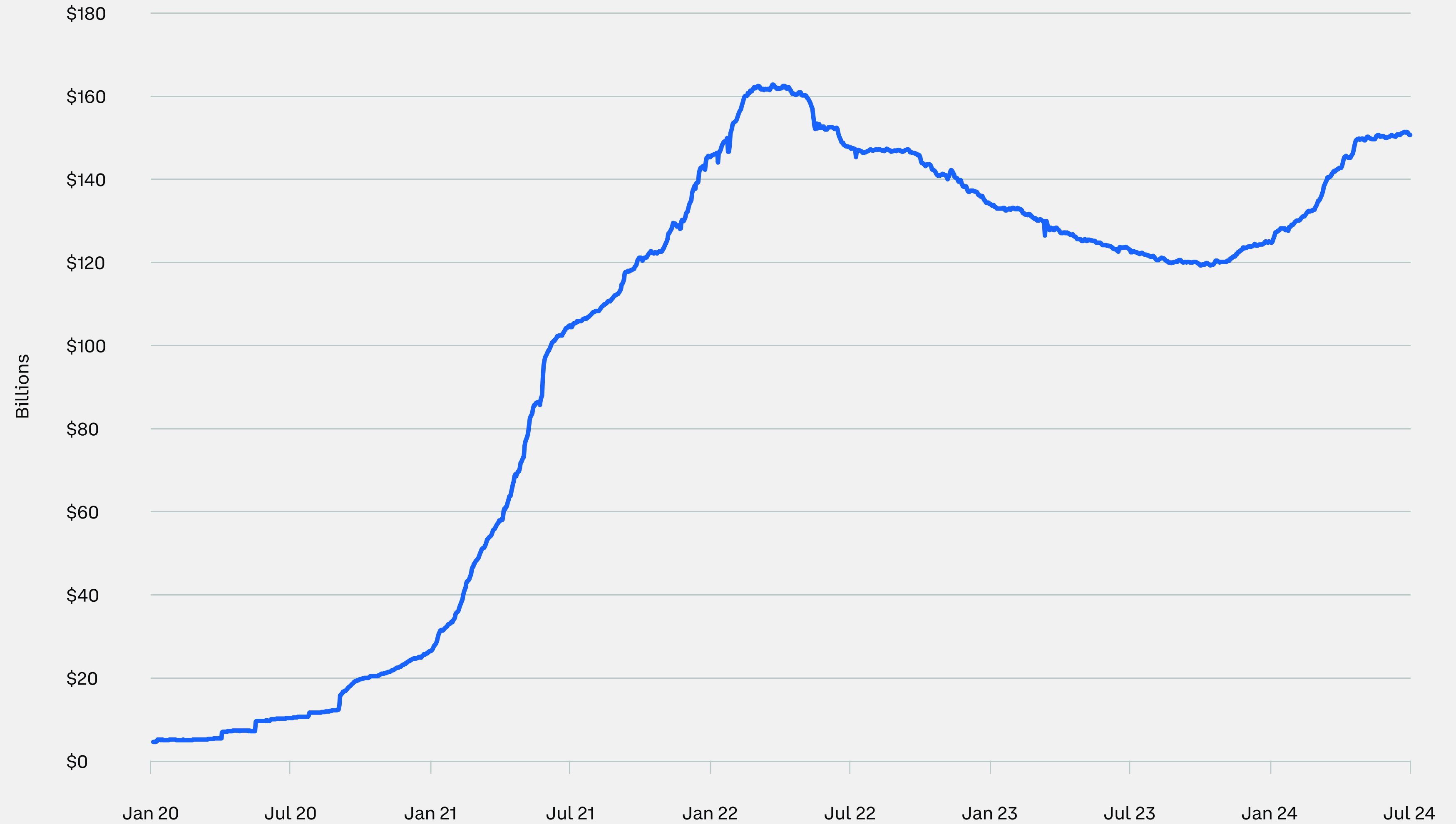


# Partner Focus Factor6 Capital

Total stablecoin market cap has now surpassed pre-3AC levels, increasing by \$2B in the last two weeks alone to reach \$162.5B. We consider stablecoin market cap a reliable predictor of asset prices over longer timeframes.

As capital continues to flow into the system, it's difficult to adopt a bearish outlook as long as this trend persists.

## Factor6 Capital



# 01 Market Overview

## Total Crypto Market Cap

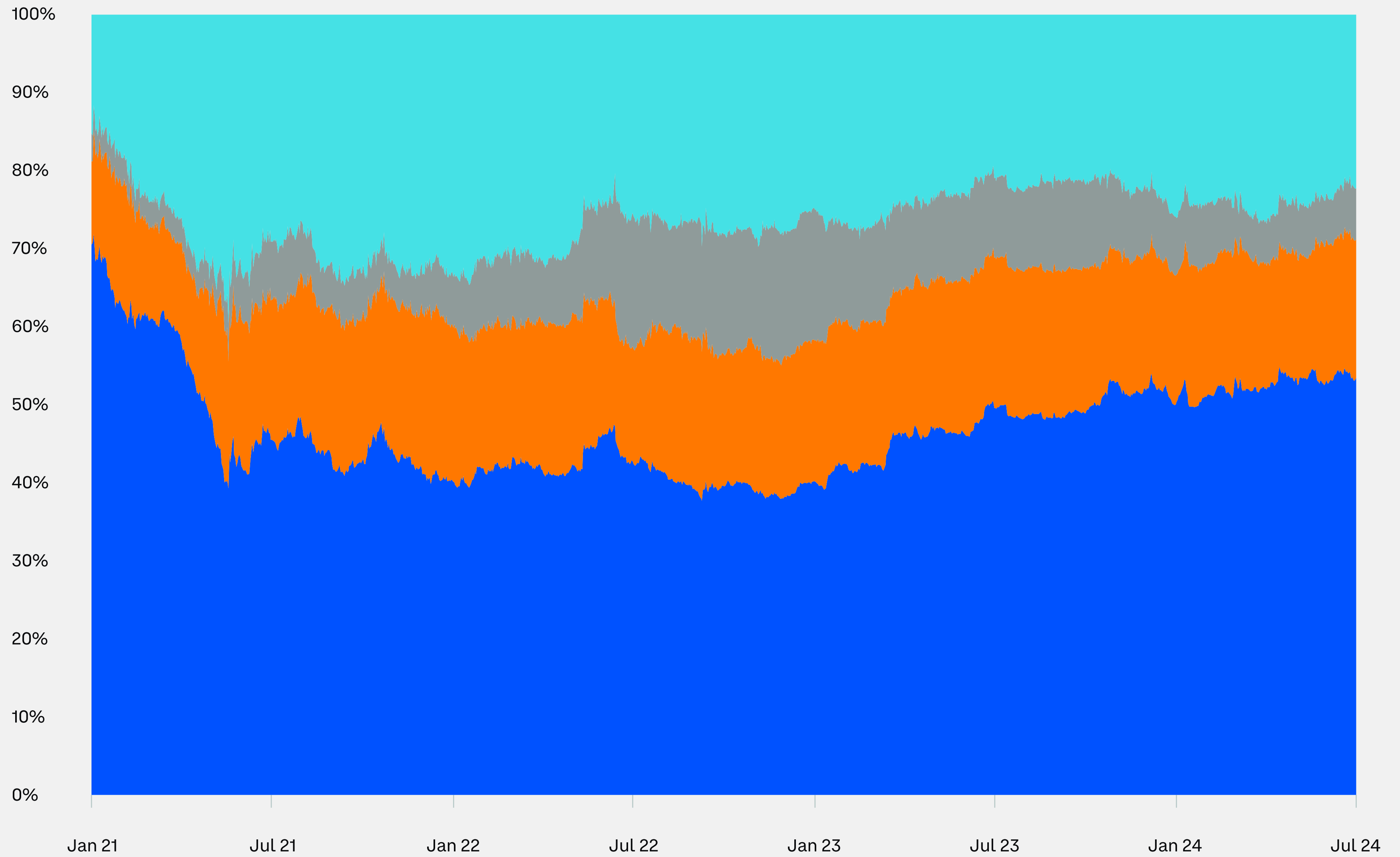
Total crypto market cap measures the global market cap of digital assets including bitcoin, ether, altcoins, and stablecoins. The total market cap of the crypto universe fell 14% in the second quarter, after rising by more than 60% in the first quarter.



# Crypto Dominance

Crypto dominance measures a cryptocurrency's market capitalization as a percentage of the total market cap of all cryptocurrencies. BTC, ETH, and stablecoin dominance all rose modestly in the second quarter, while altcoin dominance fell 27%, as market participants were drawn to higher-quality assets.

## Market Overview



# Correlations

Crypto has historically shown very low correlations with traditional asset classes, indicating that it can be a meaningful source of idiosyncratic risk.

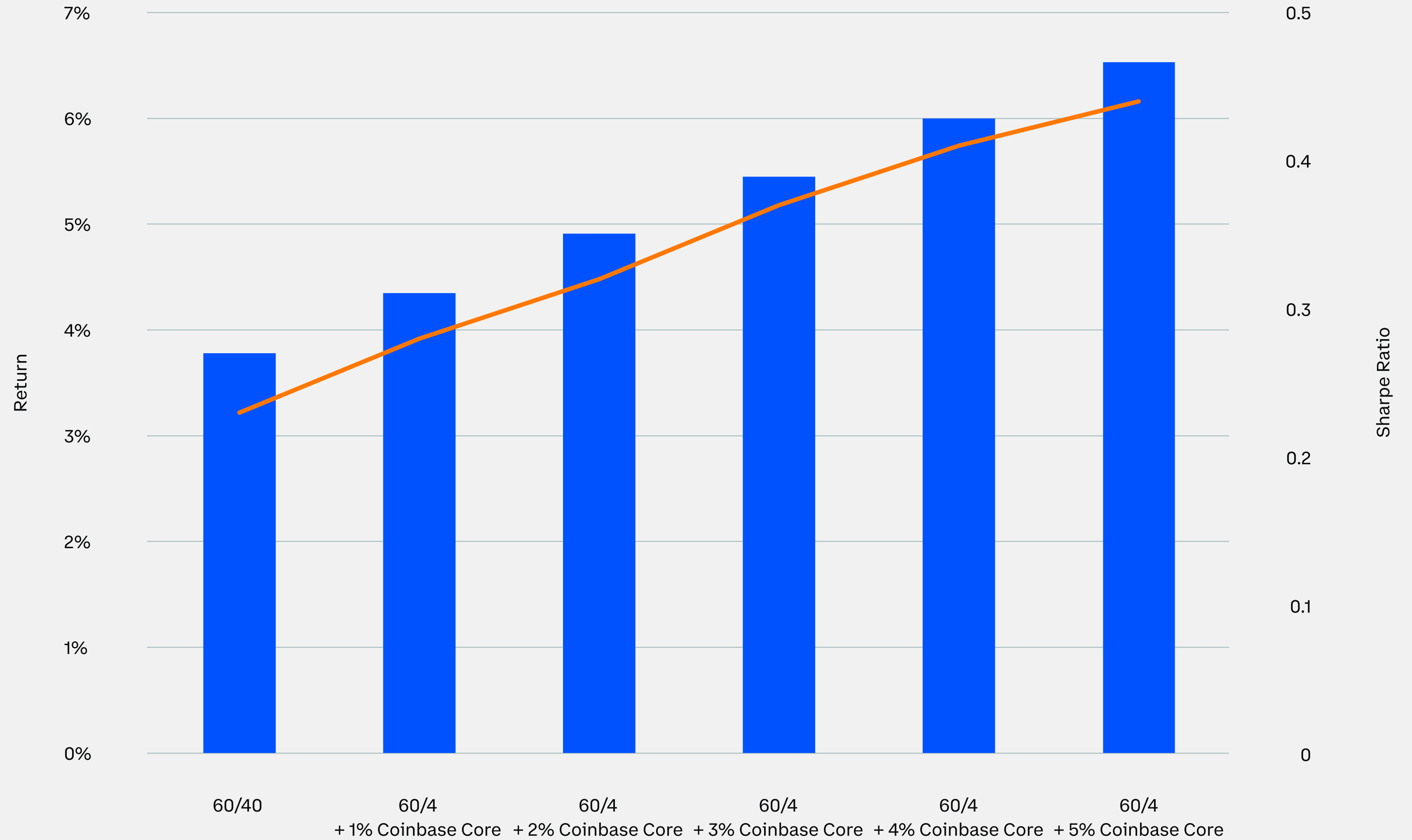
	BTC/USD	ETH/USD	SPX	GOLD	SILVER	CRY	COPPER	MOVE	DYX	VIX	US 2Y	US 10Y	US AGG
BTC/USD	1.00	0.79	0.42	0.15	0.12	0.23	0.14	-0.24	-0.31	-0.36	-0.06	-0.16	0.21
ETH/USD	0.79	1.00	0.44	0.18	0.20	0.16	0.19	-0.23	-0.33	-0.45	-0.04	-0.09	0.12
SPX	0.42	0.44	1.00	0.22	0.14	0.14	0.07	-0.35	-0.38	-0.76	-0.29	-0.32	0.40
GOLD	0.15	0.18	0.22	1.00	0.84	0.37	0.60	-0.03	-0.41	-0.06	-0.23	-0.17	0.18
SILVER	0.12	0.20	0.14	0.84	1.00	0.53	0.72	0.03	-0.39	0.05	-0.17	-0.04	0.05
CRY	0.23	0.16	0.14	0.37	0.53	1.00	0.51	0.02	-0.06	0.04	0.00	0.01	0.02
COPPER	0.14	0.19	0.07	0.60	0.72	0.51	1.00	0.17	-0.30	0.08	-0.16	-0.09	0.06
MOVE	-0.24	-0.23	-0.35	-0.03	0.03	0.02	0.17	1.00	0.34	0.52	0.20	0.24	-0.28
DYX	-0.31	-0.33	-0.38	-0.41	-0.39	-0.06	-0.30	0.34	1.00	0.42	0.57	0.54	-0.57
VIX	-0.36	-0.45	-0.76	-0.06	0.05	0.04	0.08	0.52	0.42	1.00	0.17	0.22	-0.31
US 2Y	-0.06	-0.04	-0.29	-0.23	-0.17	0.00	-0.16	0.20	0.57	0.17	1.00	0.88	-0.88
US 10Y	-0.16	-0.09	-0.32	-0.17	-0.04	0.01	-0.09	0.24	0.54	0.22	0.88	1.00	-0.96
US AGG	0.21	0.12	0.40	0.18	0.05	0.02	0.06	-0.28	-0.57	-0.31	-0.88	-0.96	1.00

# Portfolio Diversification

Allocations to cryptocurrency can provide a diversifying source of risk and return to traditional portfolios. In this table, we measure the effects of adding small allocations to the Coinbase Core Index (COINCORE) to a portfolio comprised of 60% MSCI ACWI and 40% US Agg, adjusting the equity and bond positions proportionally.

COINCORE is a market cap-weighted crypto index that is rebalanced quarterly with an almost 94% combined allocation to bitcoin (65.3%) and ether (28.7%) among eight total constituents.

The analysis looks at the period from June 2019 – June 2024, which encompassed two major cycles of crypto price depreciation and appreciation. As seen in the table, adding COINCORE to the 60/40 portfolio increased both absolute and risk-adjusted returns. For more information on the impacts of adding crypto to a portfolio, see ["Crypto's Role in Portfolio Diversification."](#)



# Asset Class Performance

Bitcoin has been the top-performing asset in eight of the past 11 years. However, it was the bottom-performing asset in the other three years, when it experienced large drawdowns.

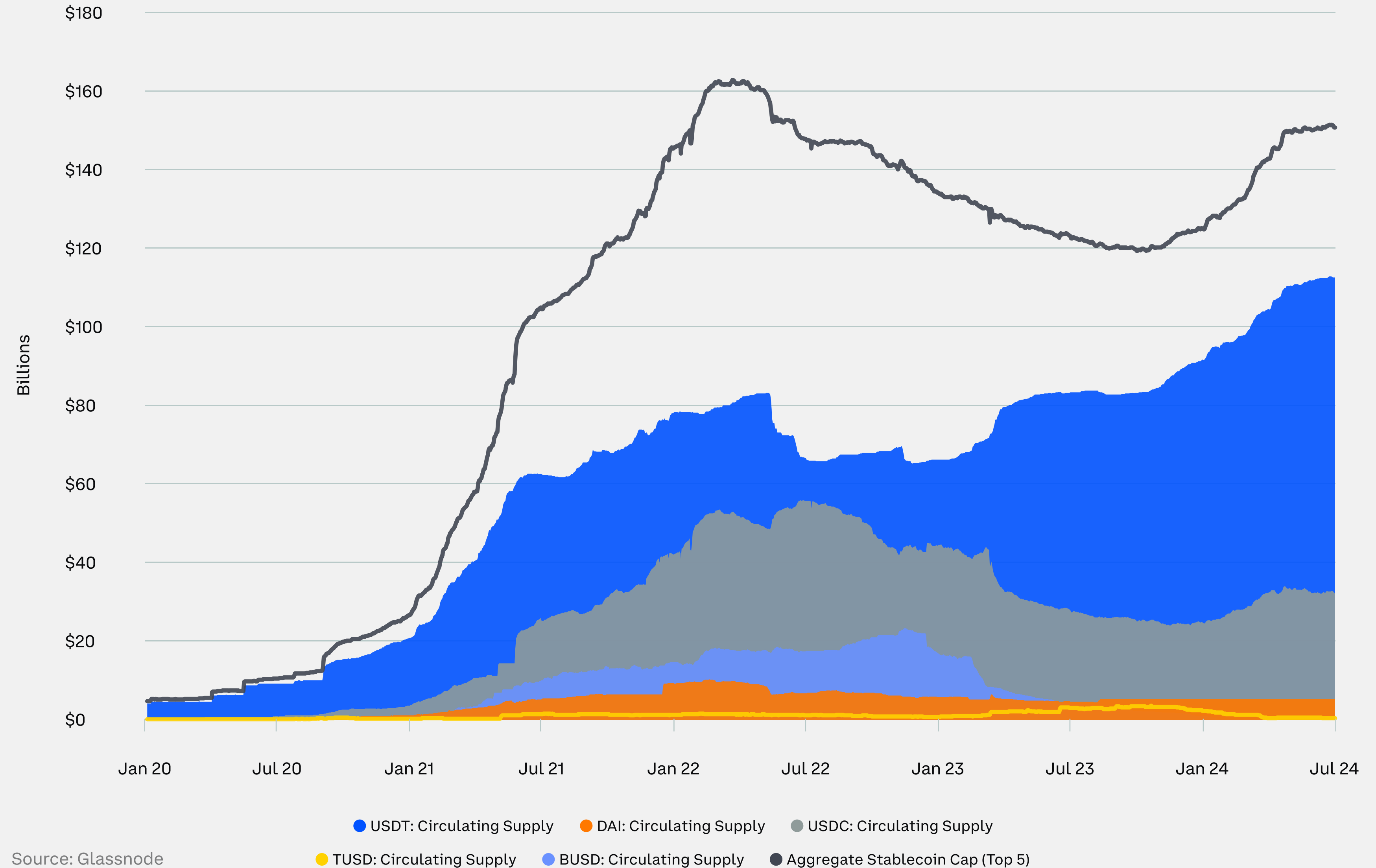
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total	Annual
Bitcoin 5,516%	S&P 500 12%	Bitcoin 37%	Bitcoin 119%	Bitcoin 1,300%	Investment-Grade Bonds 0%	Bitcoin 92%	Bitcoin 302%	Bitcoin 58%	Commodities 20%	Bitcoin 156%	Bitcoin 315,678%	Bitcoin 124%
S&P 500 26%	Investment-Grade Bonds 5%	Investment-Grade Bonds 0%	High Yield Bonds 17%	Emerging Markets Equities 35%	High Yield Bonds -2%	S&P 500 29%	Gold 24%	Commodities 30%	Gold 1%	S&P 500 25%	S&P 500 226%	S&P 500 13%
High Yield Bonds 6%	High Yield Bonds 2%	S&P 500 -1%	Emerging Markets Equities 15%	S&P 500 18%	Gold -3%	Emerging Markets Equities 21%	S&P 500 15%	S&P 500 29%	High Yield Bonds -11%	High Yield Bonds 12%	High Yield Bonds 64%	High Yield Bonds 5%
Investment-Grade Bonds -1%	Emerging Markets Equities 1%	High Yield Bonds -4%	Commodities 14%	Gold 12%	S&P 500 -7%	Gold 18%	Emerging Markets Equities 14%	High Yield Bonds 5%	Investment-Grade Bonds -12%	Gold 12%	Emerging Markets Equities 35%	Emerging Markets Equities 3%
Emerging Markets Equities -3%	Gold -3%	Gold -11%	S&P 500 11%	High Yield Bonds 7%	Commodities -9%	High Yield Bonds 14%	Investment-Grade Bonds 7%	Emerging Markets Equities 0%	Emerging Markets Equities -18%	Emerging Markets Equities 9%	Gold 18%	Gold 2%
Commodities -9%	Commodities -18%	Emerging Markets Equities -14%	Gold 7%	Commodities 6%	Emerging Markets Equities -15%	Commodities 10%	High Yield Bonds 7%	Investment-Grade Bonds -1%	S&P 500 -20%	Investment-Grade Bonds 5%	Investment-Grade Bonds 17%	Investment-Grade Bonds 2%
Gold -29%	Bitcoin -58%	Commodities -9%	Investment-Grade Bonds 2%	Investment-Grade Bonds 3%	Bitcoin -73%	Investment-Grade Bonds 8%	Commodities -3%	Gold -6%	Bitcoin -65%	Commodities -2%	Commodities -4%	Commodities 0%

Source: Bloomberg, BlackRock calculations, as of December 31, 2023. Bitcoin returns calculated using Bloomberg Bitcoin Spot Price. S&P 500 is represented by the S&P 500 Total Return Index (USD). Emerging Market Equities are represented by the Dow Jones Emerging Markets Total Return Index (USD). Investment Grade Bonds are represented by the S&P U.S. Aggregate Bond Index. High Yield Bonds are represented by the S&P U.S. High Yield Corporate Bond Index. Gold is the 1oz price of gold from Bloomberg. Commodities are represented by Dow Jones Commodity Index.

# Stablecoin Supply

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.

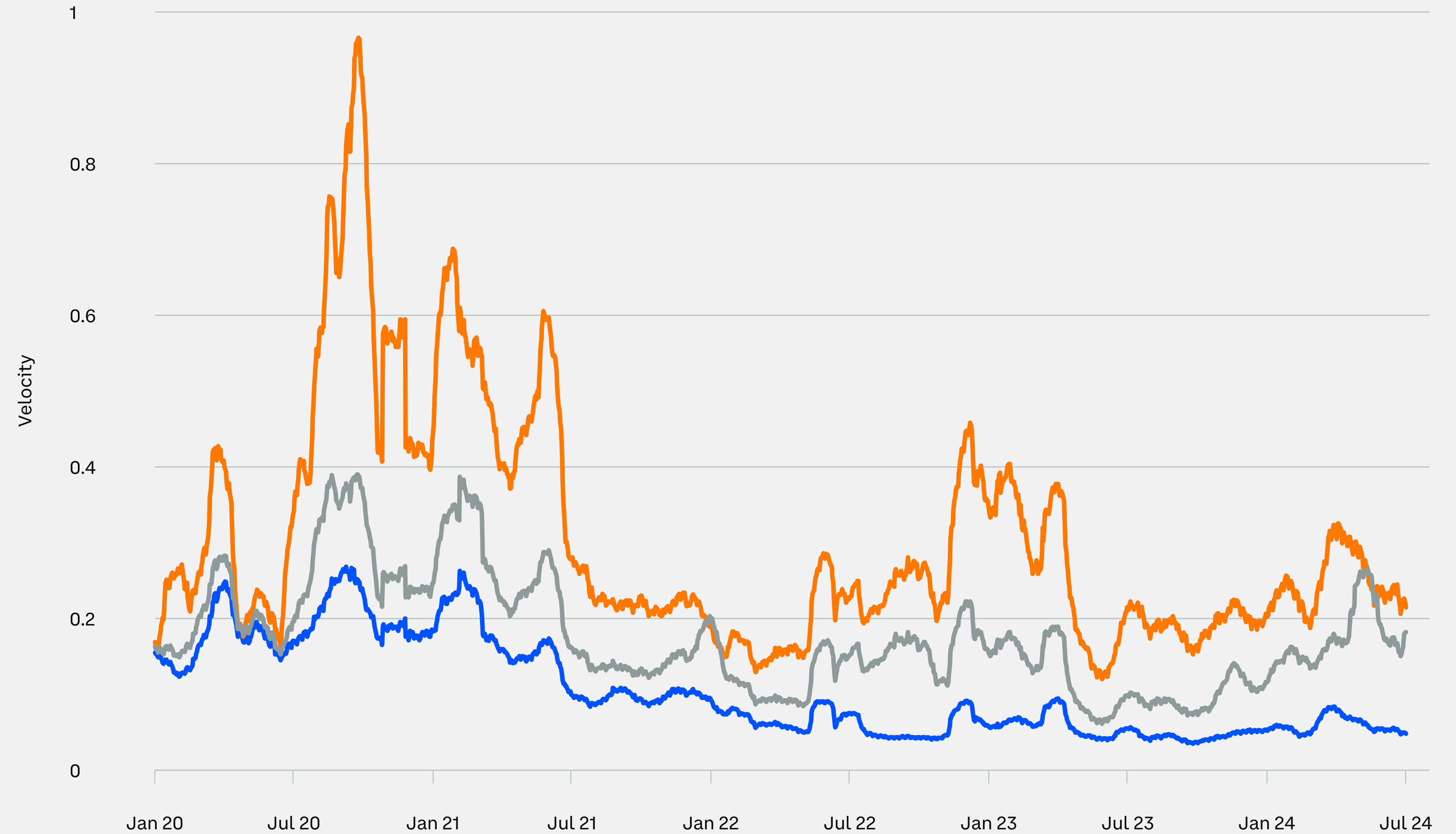
The supply of stablecoins increased 6% in the second quarter as a variety of use cases continue to take hold.



Source: Glassnode

# Stablecoin Network Velocity

Stablecoin velocity measures how quickly units are circulating in the network. It is calculated by dividing the onchain transaction volume of a stablecoin (in USD) by its market cap. Aggregate velocity is nearing 0.2, which means 20% of the total supply is transacting on a daily basis.

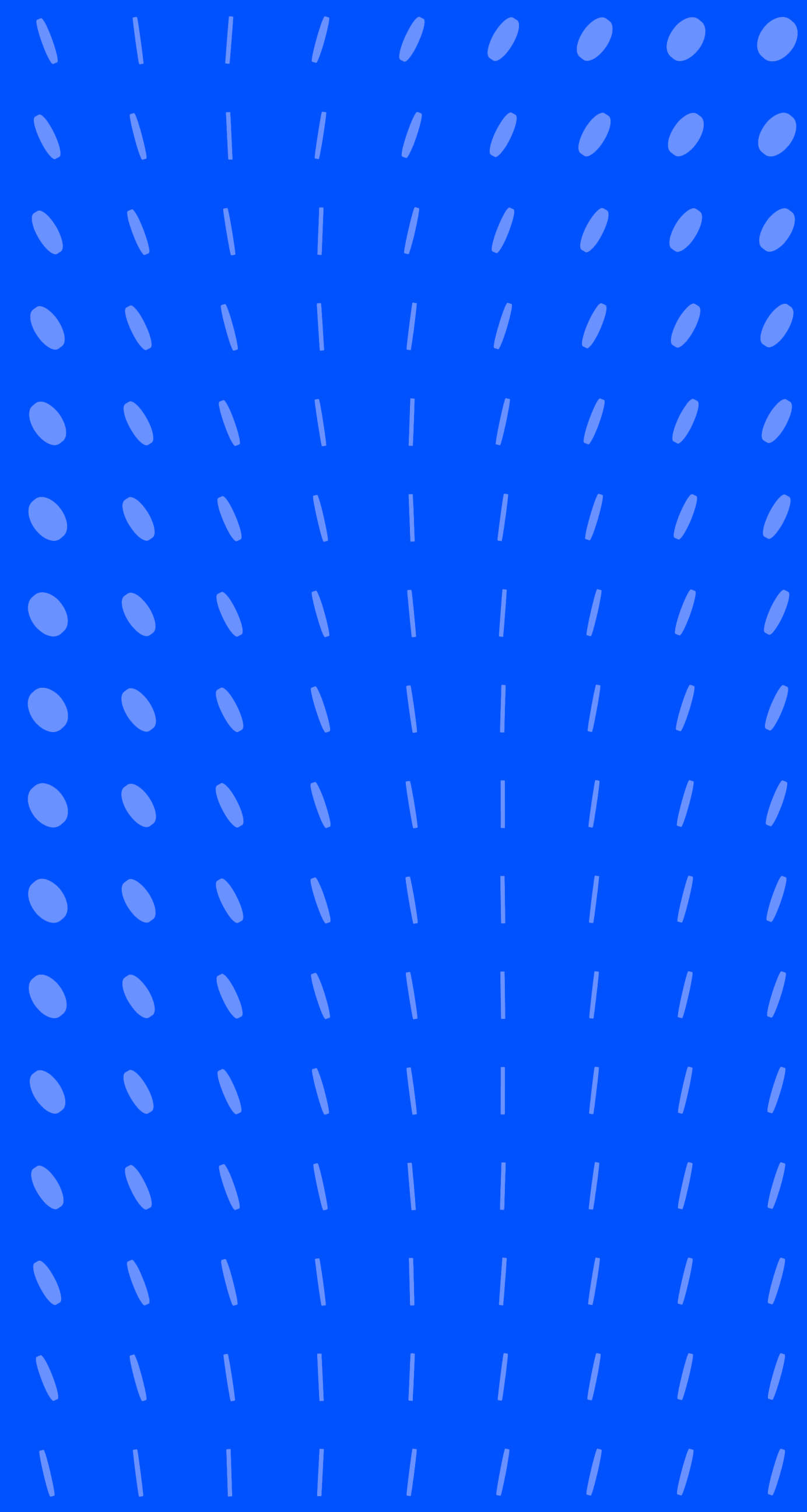




# Spotlight

## Gauging the Market Cycle

Crypto is famous for its market cycles. Throughout its history, bitcoin has seen four distinct market cycles that saw both stratospheric gains and severe drawdowns. As markets retreated during the second quarter, many investors, including some that are new to the asset class, wondered whether the current bull cycle that began in late 2022 might be over. While no two cycles are the same and history rarely repeats itself, the data in this section points to one conclusion: we are most likely somewhere near the middle of the current cycle, and the second-quarter pullback is in line with what we've seen in the past.



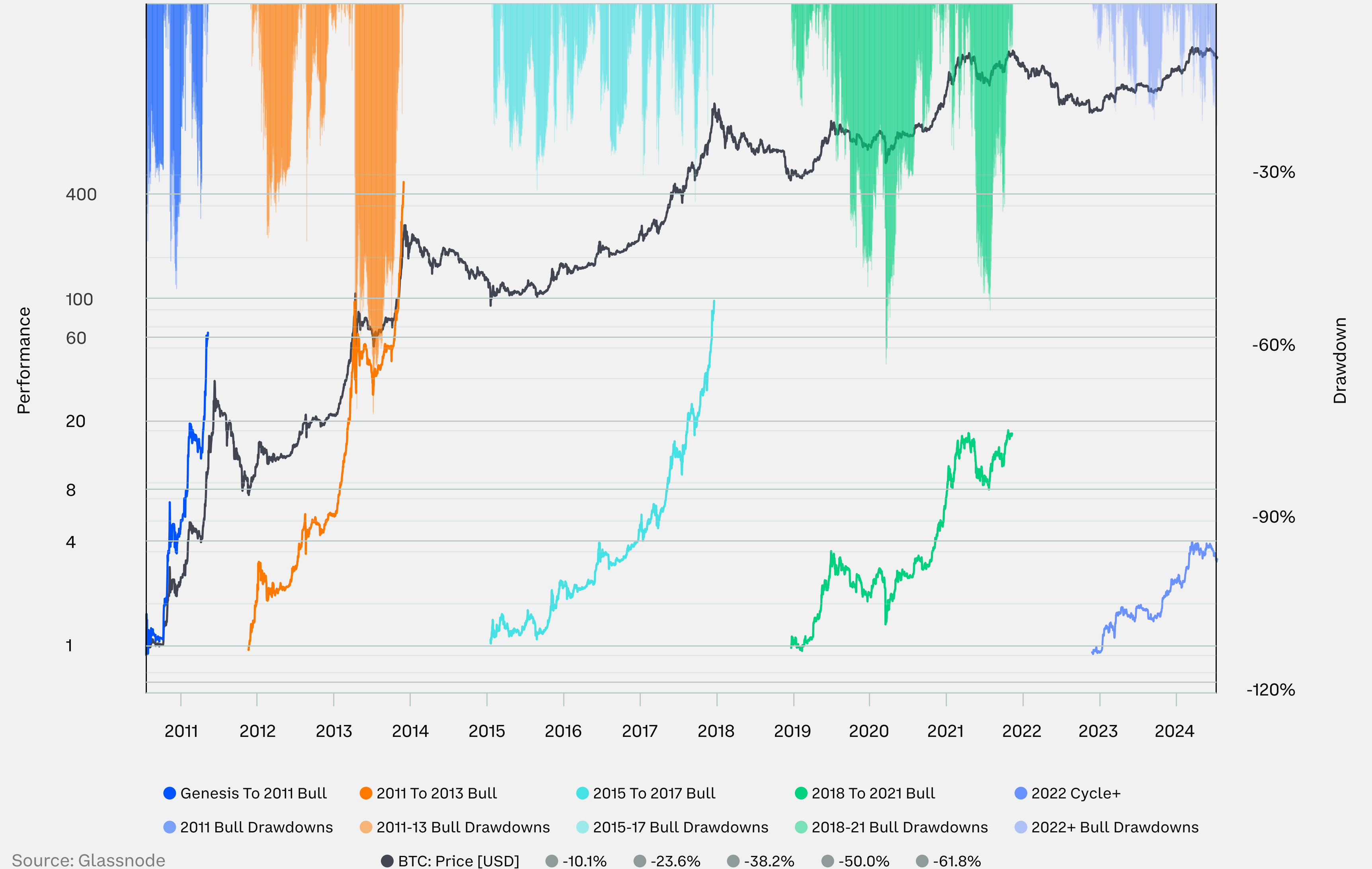
# BTC Cycle Performance and Drawdowns

Bitcoin has historically exhibited exponential gains during bull cycles, but each cycle has also seen numerous large drawdowns.

The current bull market cycle, which began in November 2022, has seen prices reach ~4x from the lows. The two prior bull markets (2015-2017 and 2018-2021) saw prices rise 100x and 20x, respectively.

Prior cycles saw an average of:  
 Nine drawdowns between 5%-20%  
 Three drawdowns between 20%-40%  
 One drawdown between 40%-70%

The current cycle has seen:  
 Eight drawdowns between 5%-20%  
 Two drawdowns between 20%-30%  
 No drawdowns greater than 30%



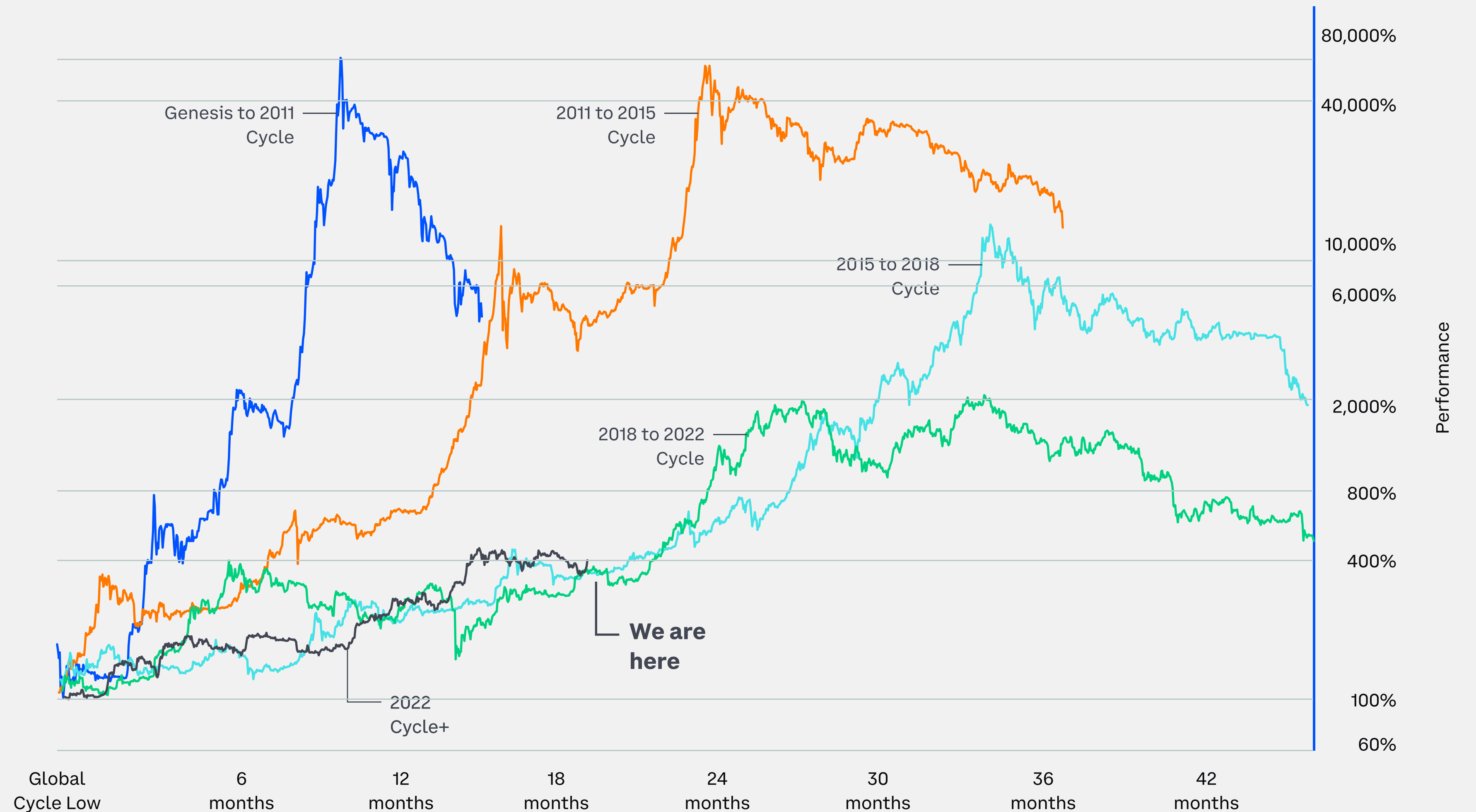
Source: Glassnode

# BTC Price Performance Since Cycle Low

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.

In the current cycle, BTC is up ~400% since hitting its cycle low in November 2022.

The current cycle most closely resembles the cycle from 2018-2022, which saw BTC hit a high that was up 2,000% from the cycle low.



# BTC Price Performance Since Halving

This chart measures the total return of BTC during each of the Halving cycles, or epochs.

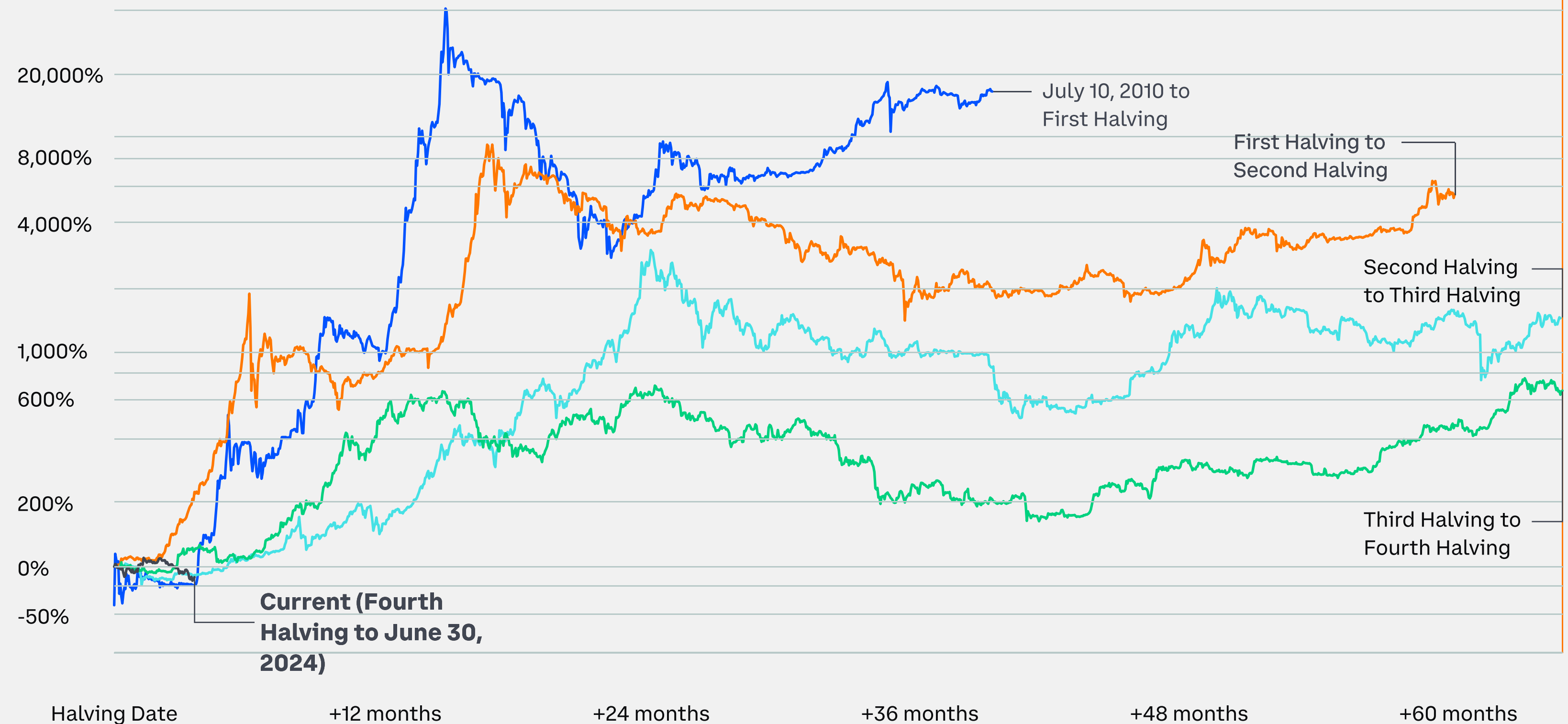
Immediately following the Halvings, the price tends to trade sideways — as it is presently. However, within 12 months following the first three Halvings, the price tends to appreciate meaningfully.

Following the first Halving (orange line), prices gained more than 1,000% in the first 12 months.

Following the second Halving (turquoise line), prices gained 200% in the first 12 months.

Following the third Halving (green line), prices gained more than 600% in the first 12 months.

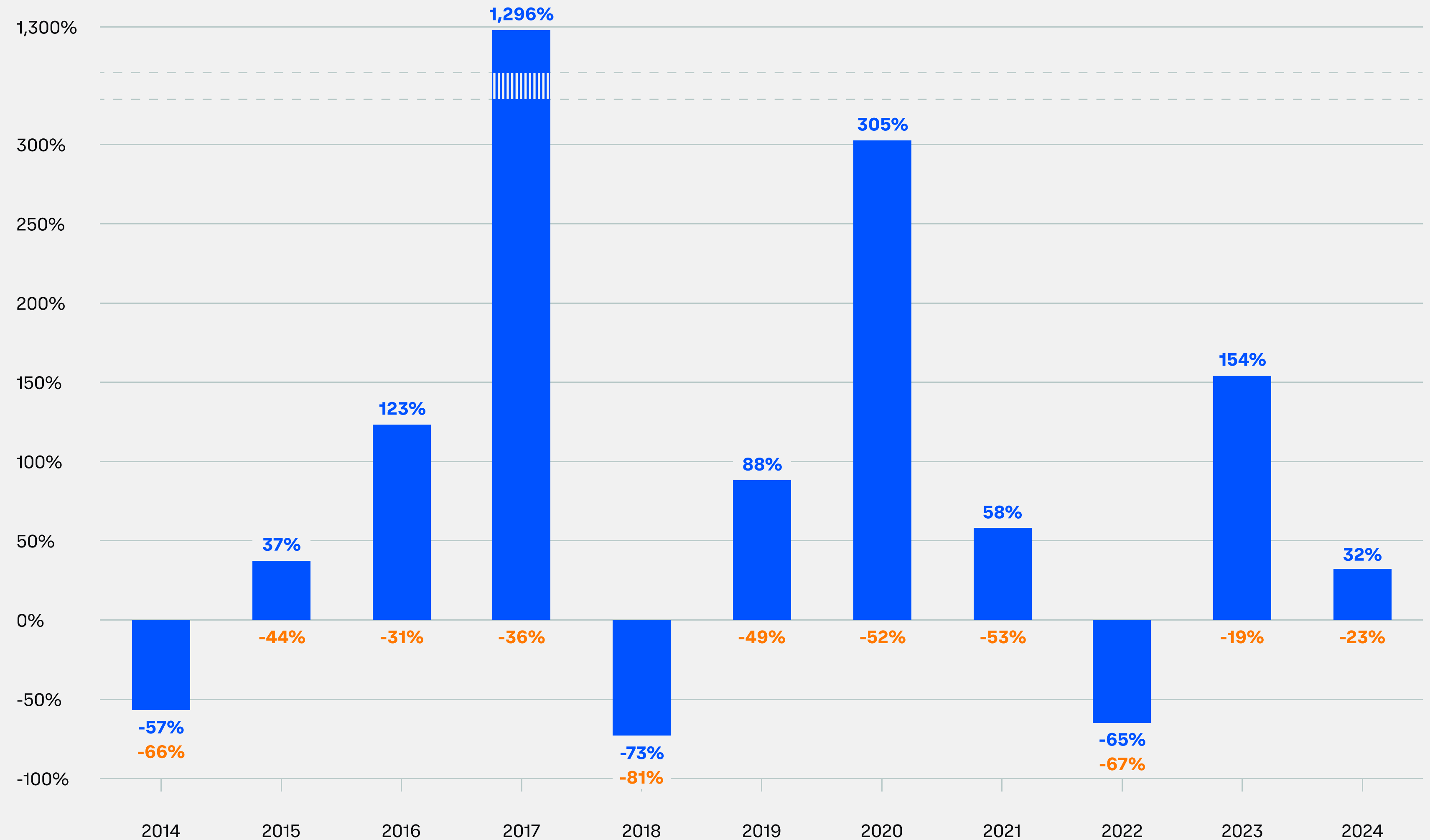
Since the fourth Halving (black line) on April 19, 2024 the price of bitcoin has fallen 2%.



# BTC Annual Returns and Drawdowns

Despite average intra-year declines of 48%, bitcoin has delivered positive returns in seven of the last 10 years.

The 23% drawdown that we saw in the first half of 2024 pales in comparison to the magnitude of the drawdowns that marked the end of previous bull cycles, indicating that this cycle may have further to run.



Source: Glassnode

## Spotlight

# ETFs Have Altered the Landscape

After amassing close to \$50 billion in AUM in less than six months, it's clear that spot bitcoin ETFs have helped to spur additional interest in crypto and bring new investors into the market. What may be less clear is the positive impact that ETFs are having on the broader crypto ecosystem.

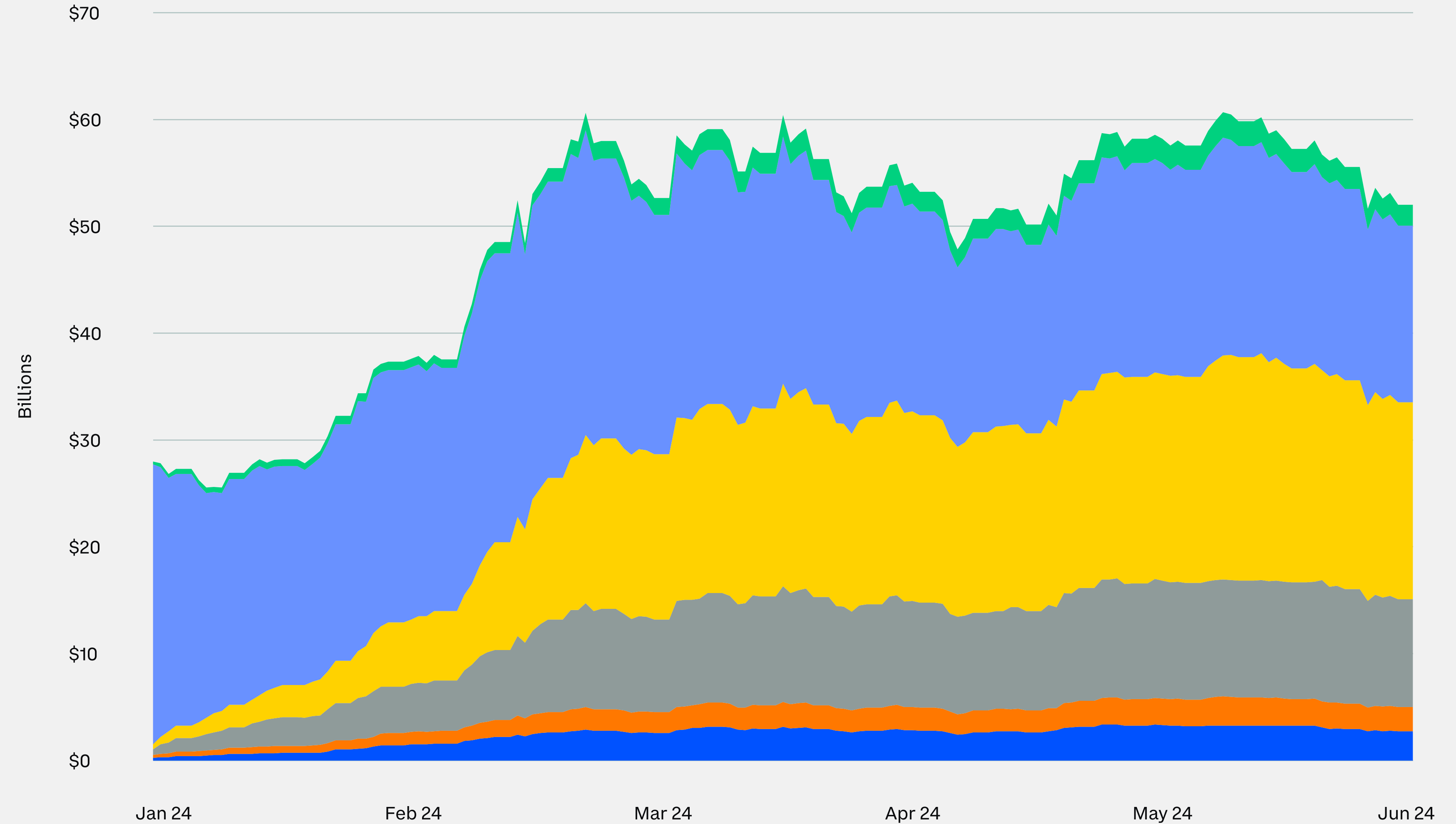
By broadening the investor base and introducing a familiar, regulated product that complements the existing vehicles for investing in crypto, ETFs have helped deepen liquidity throughout markets and opened up new opportunities for investors.

Since the launch of spot ETFs, trading volumes have increased meaningfully across spot, traditional futures, and perpetual markets, and open interest has moved substantially higher. The key takeaway from the dawn of the ETF era seems to be that ETFs are good for investors, good for market liquidity, and good for the growth of crypto as an asset class.



# BTC Spot ETF Balances

This metric provides the latest available balances of the top ten US-traded Bitcoin ETFs, typically reflecting the asset holdings at the close of the previous trading day (T+1). Each ETF's balance is reported in USD and its equivalent in Bitcoin (BTC), estimated using the closing BTC/USD exchange rate at 16:00 New York time. After debuting in January 2024, spot BTC ETFs now have more than \$50 billion dollars in AUM, making them the most successful ETF launch in history.

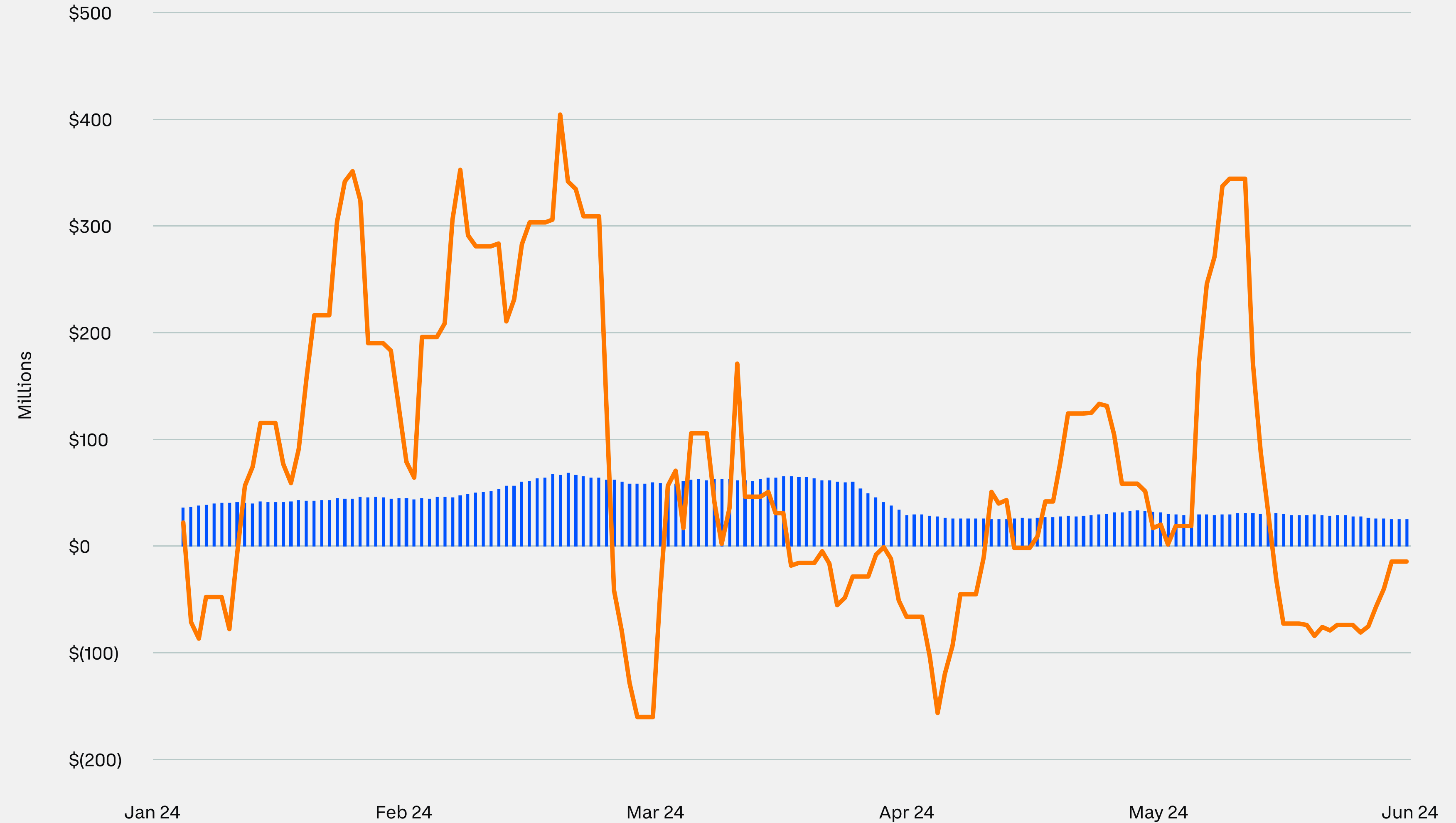


# BTC ETF Inflows vs. New Issuance

Spot ETFs have created a significant source of new demand for bitcoin, but new supply of BTC is limited to miners' rewards.

To understand the effects of ETF demand on the market, this chart compares ETF flows with new supply.

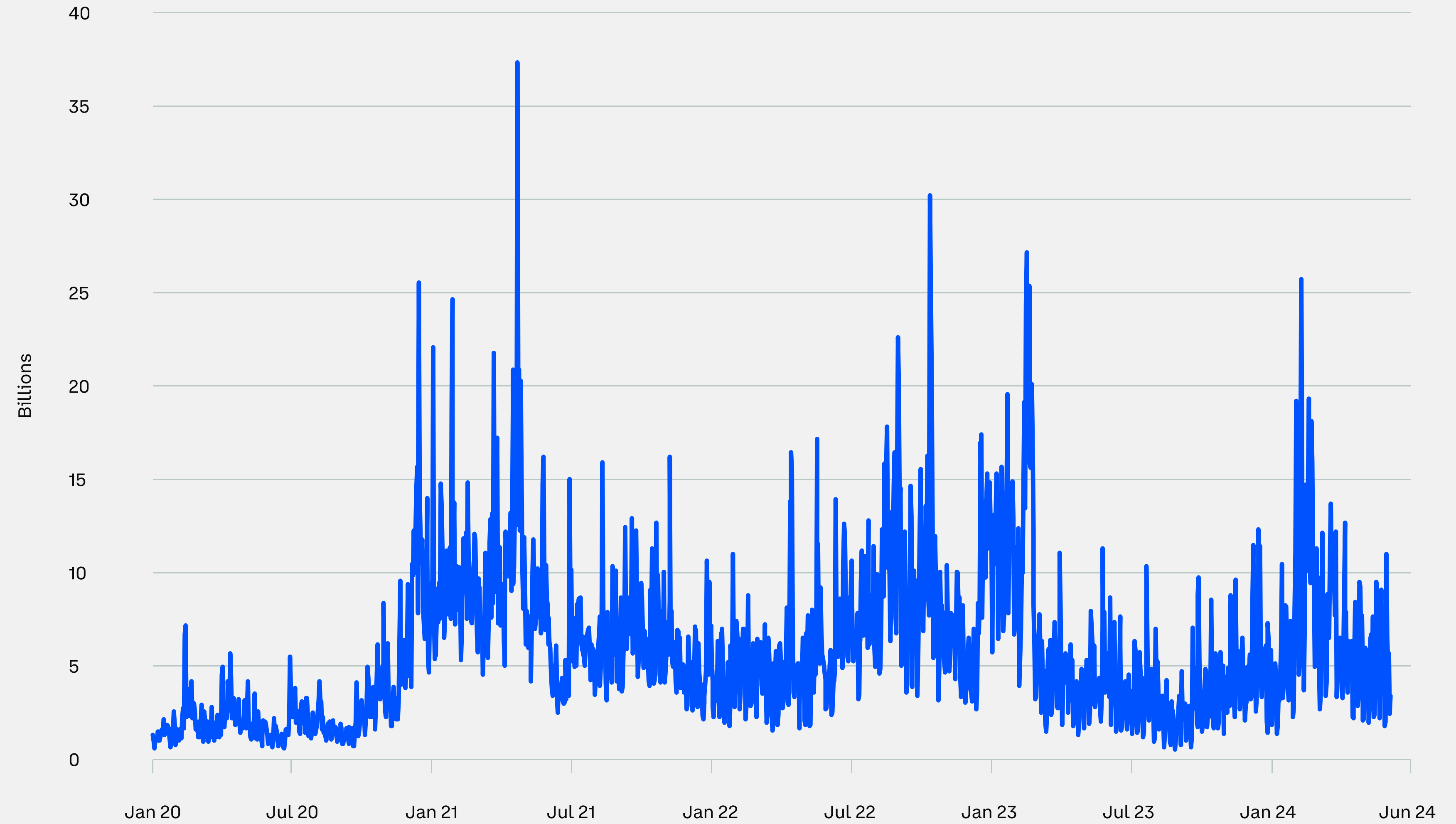
In the five-and-a-half months since spot ETFs began trading, demand from ETFs has significantly outpaced issuance.





# BTC Spot Volume

Daily trading volume in spot bitcoin is up more than 20% this year as the success of ETFs has led to a pickup in trading of the underlying asset.



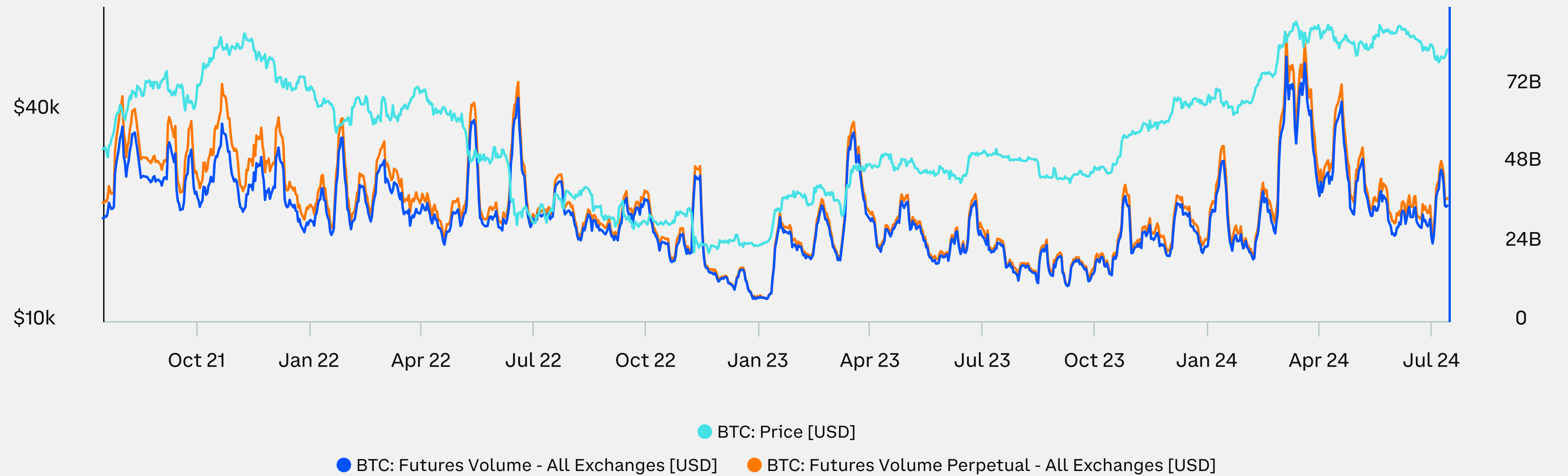
# BTC Futures Volume

Volume in crypto futures is split between traditional futures, also known as term or calendar futures, and perpetual futures (perps), which are unique to crypto. Perps do not have an expiration date, so holders do not need to roll their contracts.

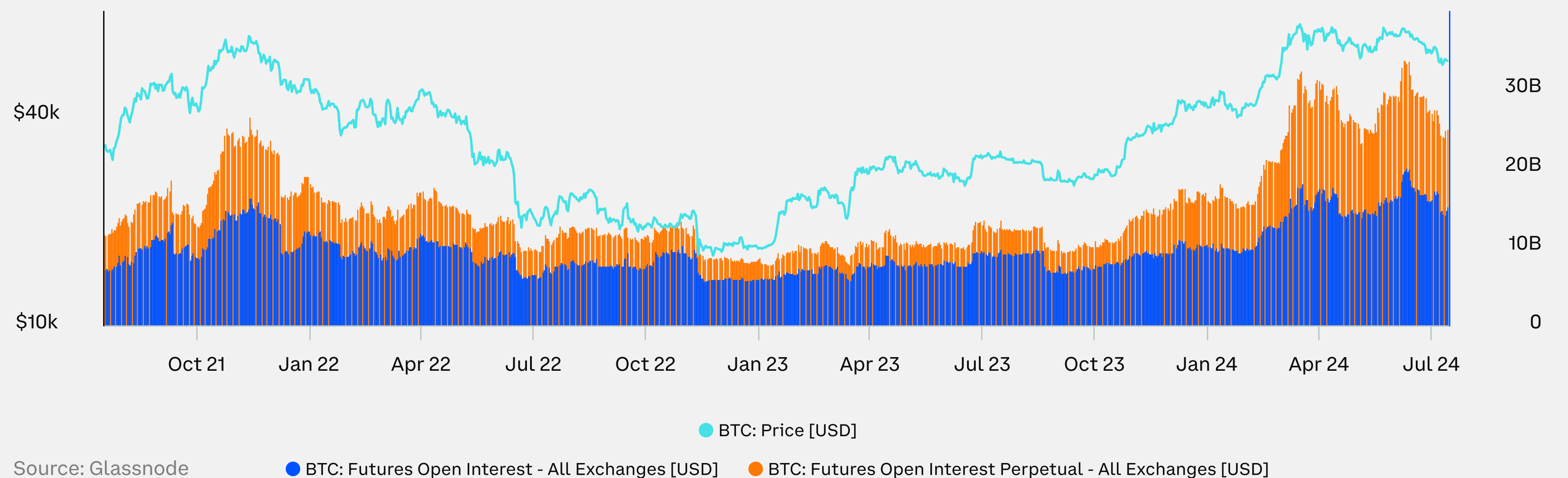
# BTC Futures Open Interest

While trading volume in BTC futures is dominated by perps, many market participants use traditional futures for hedging and to put on cash-and-carry trades, so traditional futures make up a significant portion of total BTC futures open interest.

ETFs Have Altered the Landscape

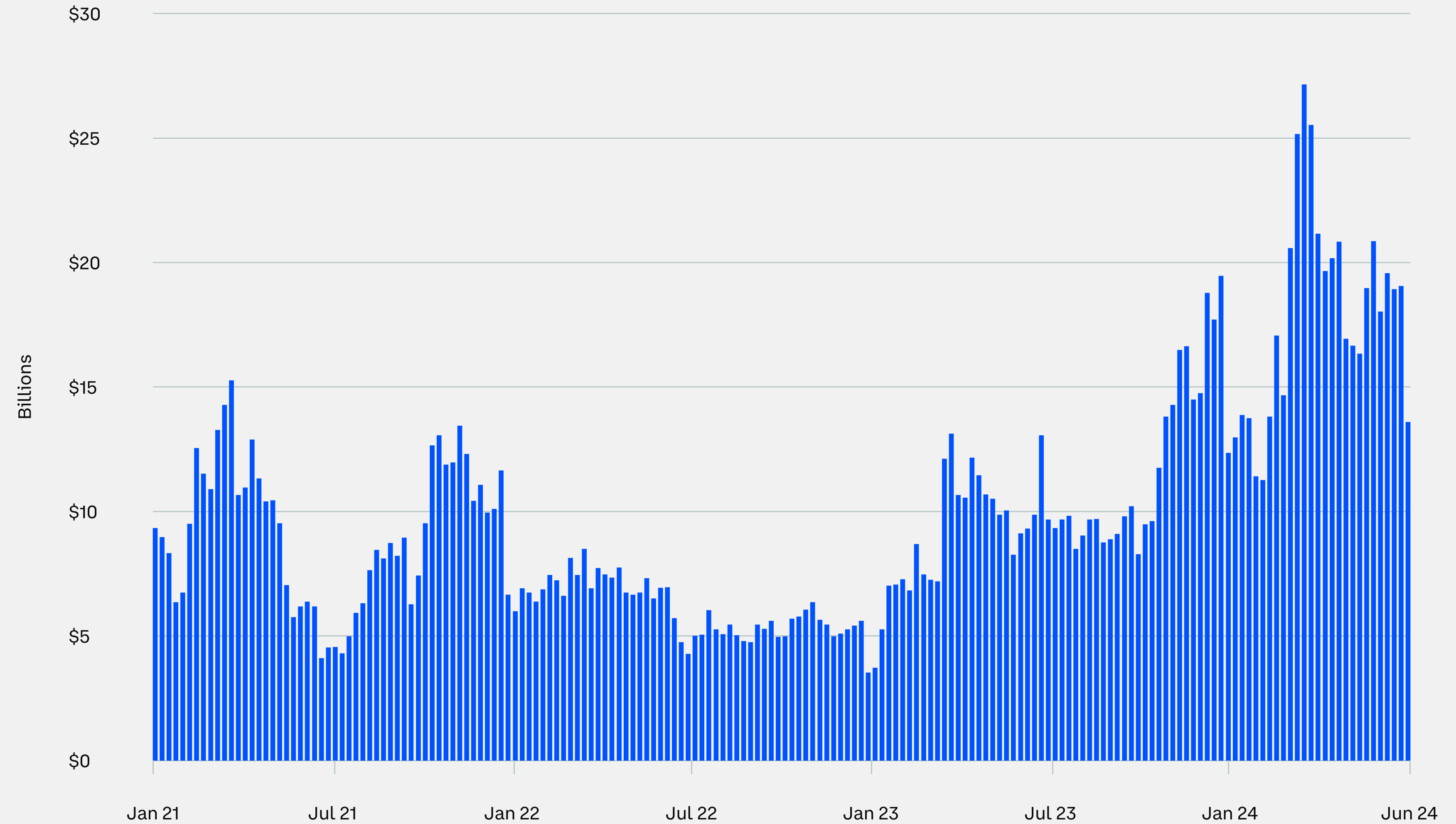


BTC Futures Open Interest



# BTC Options Open Interest

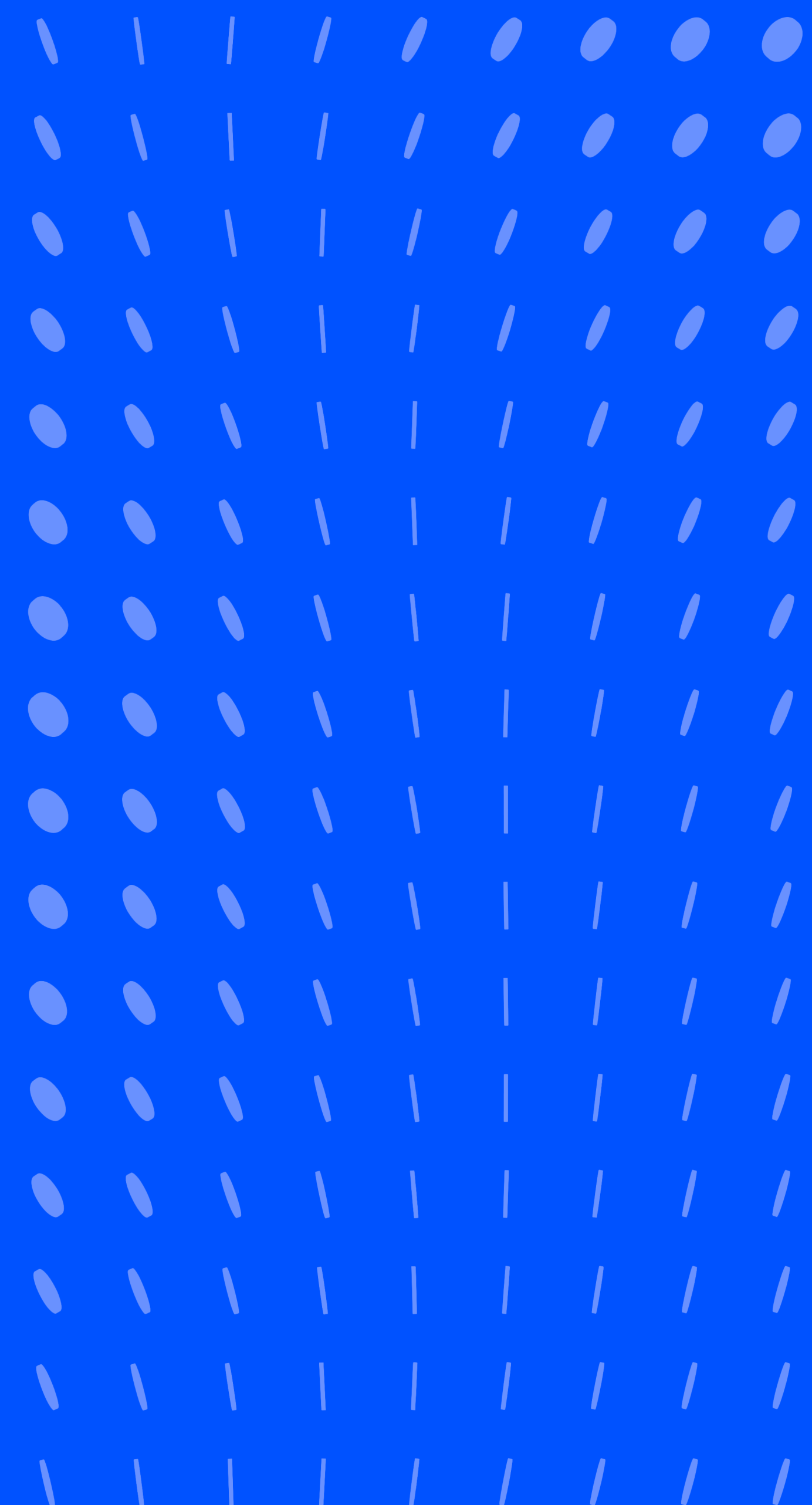
Weekly average open interest in BTC options increased by 5% in the second quarter, despite the drop in the price of bitcoin, as derivatives markets saw increased activity after the launch of spot ETFs.



# Spotlight

## Onchain Activity is Rapidly Increasing

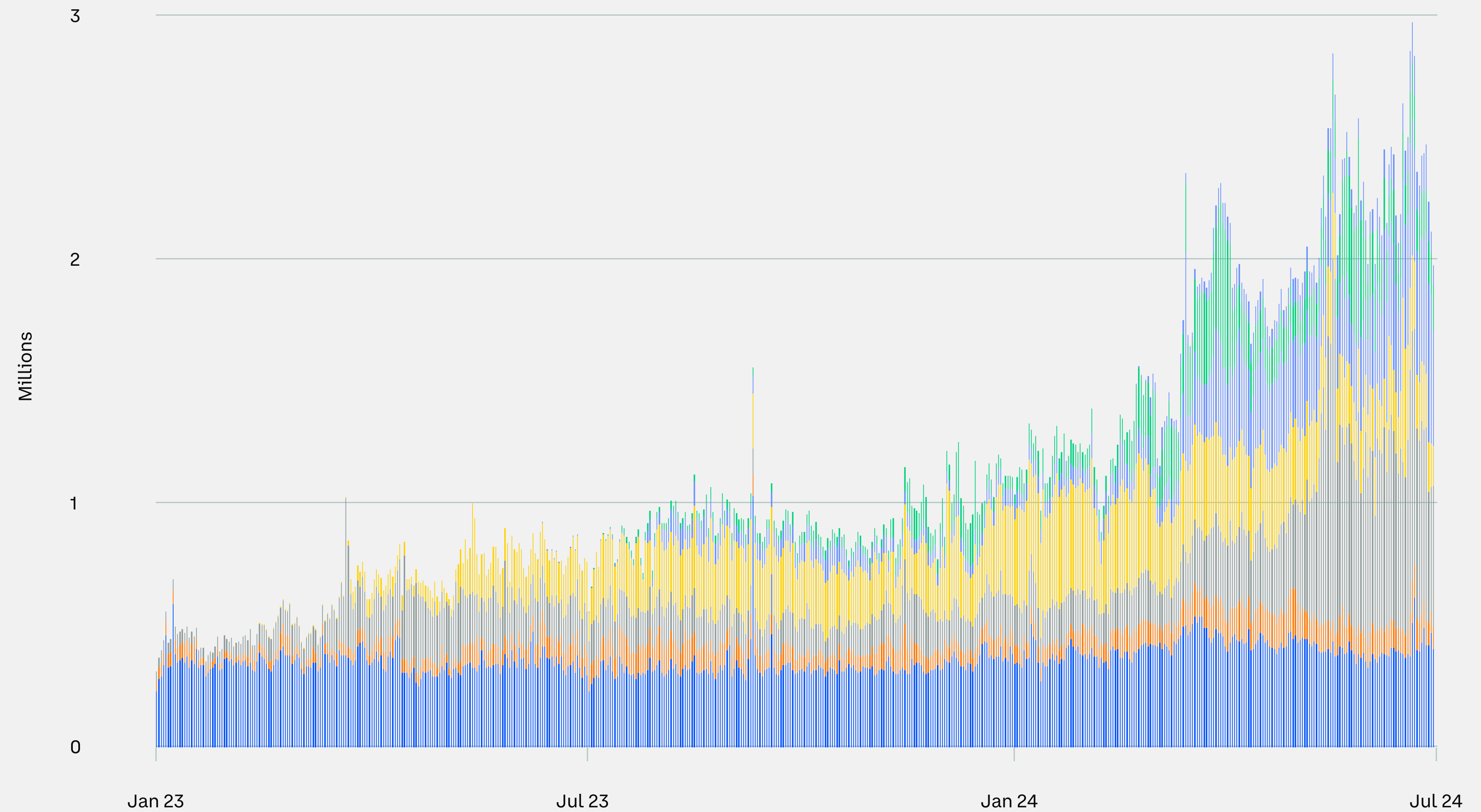
There are many ways to measure onchain activity, from total value locked to active addresses to the size of the user base. But over the past six months, they all seem to be telling the same story: activity onchain is gathering steam. The move onchain is driven by a variety of use cases, from lending to staking to trading, and we expect to see adoption grow as existing use cases mature and innovative new ones take hold.



# Daily Active Addresses Across Ethereum & L2s

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

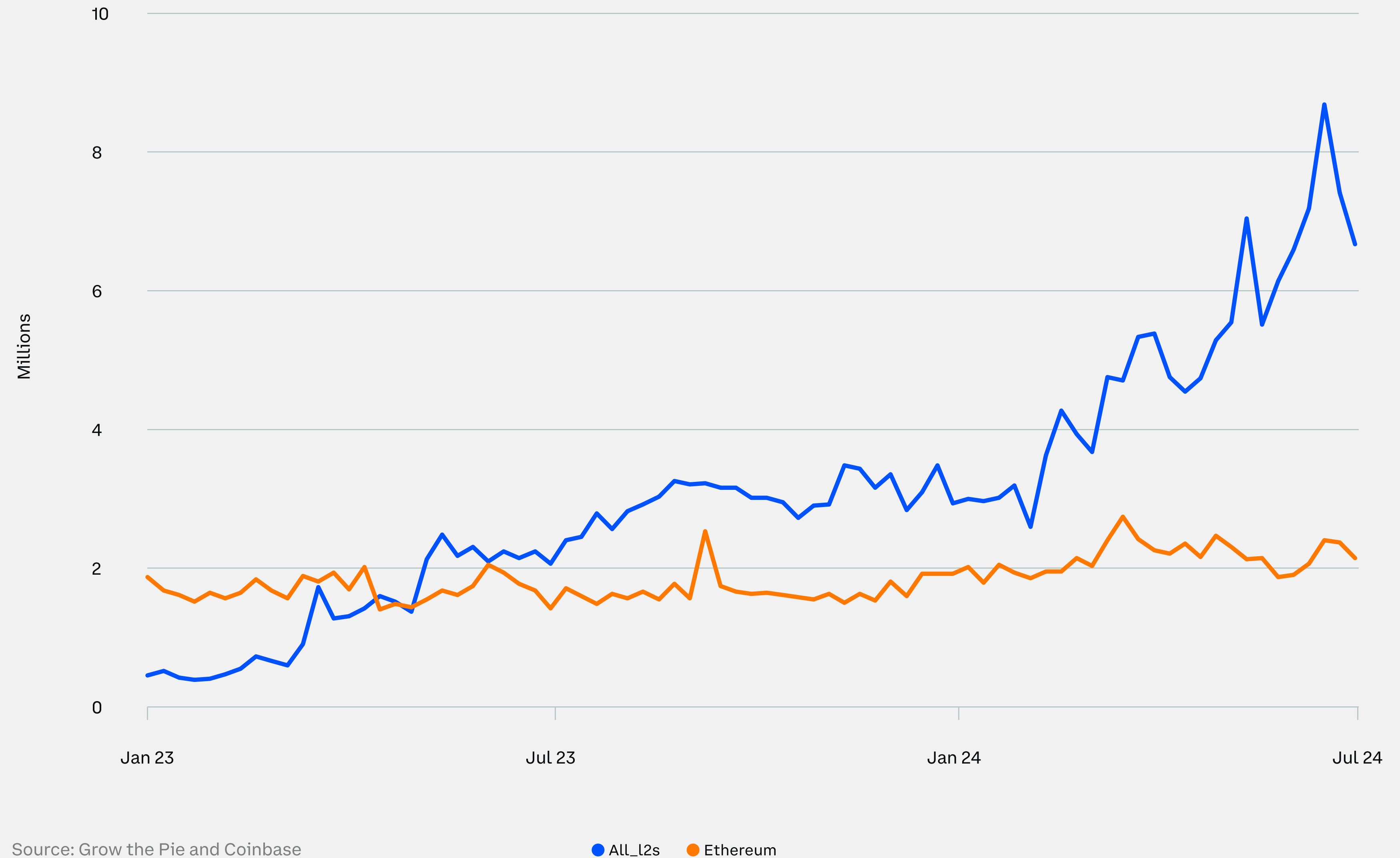
Average daily active addresses across Ethereum and the leading L2s are up 127% this year, spurred by large pickups in activity on leading L2s.



# Ethereum & L2 Unique Users

This chart measures the number of distinct addresses interacting with the Ethereum blockchain and Layer 2s in a given week.

As new, faster, and cheaper L2s have developed, user growth on L2s has vastly outpaced growth on Ethereum.

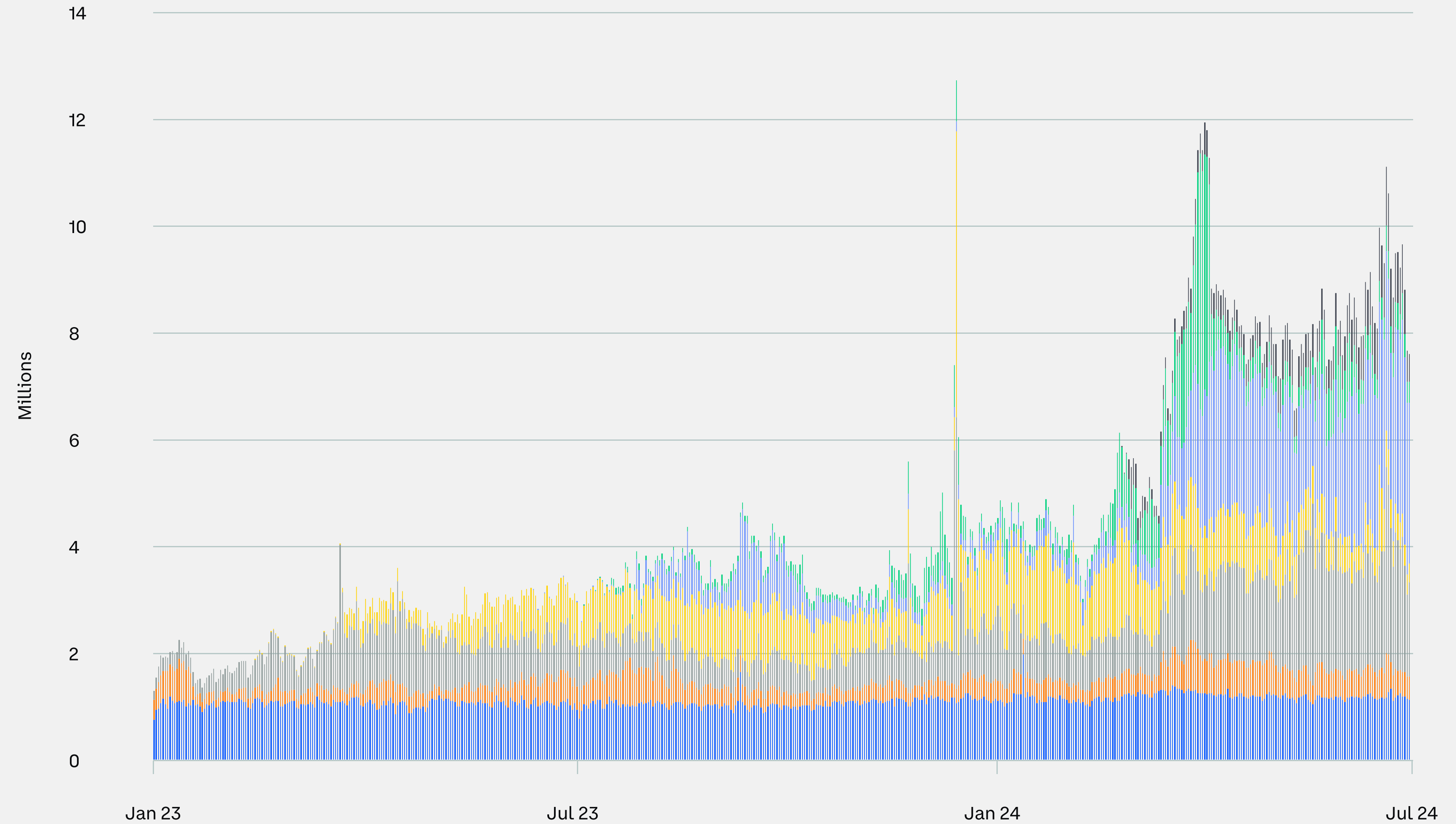


# Ethereum & L2 Transactions

The number of transactions processed on a blockchain is another important metric to measure usage.

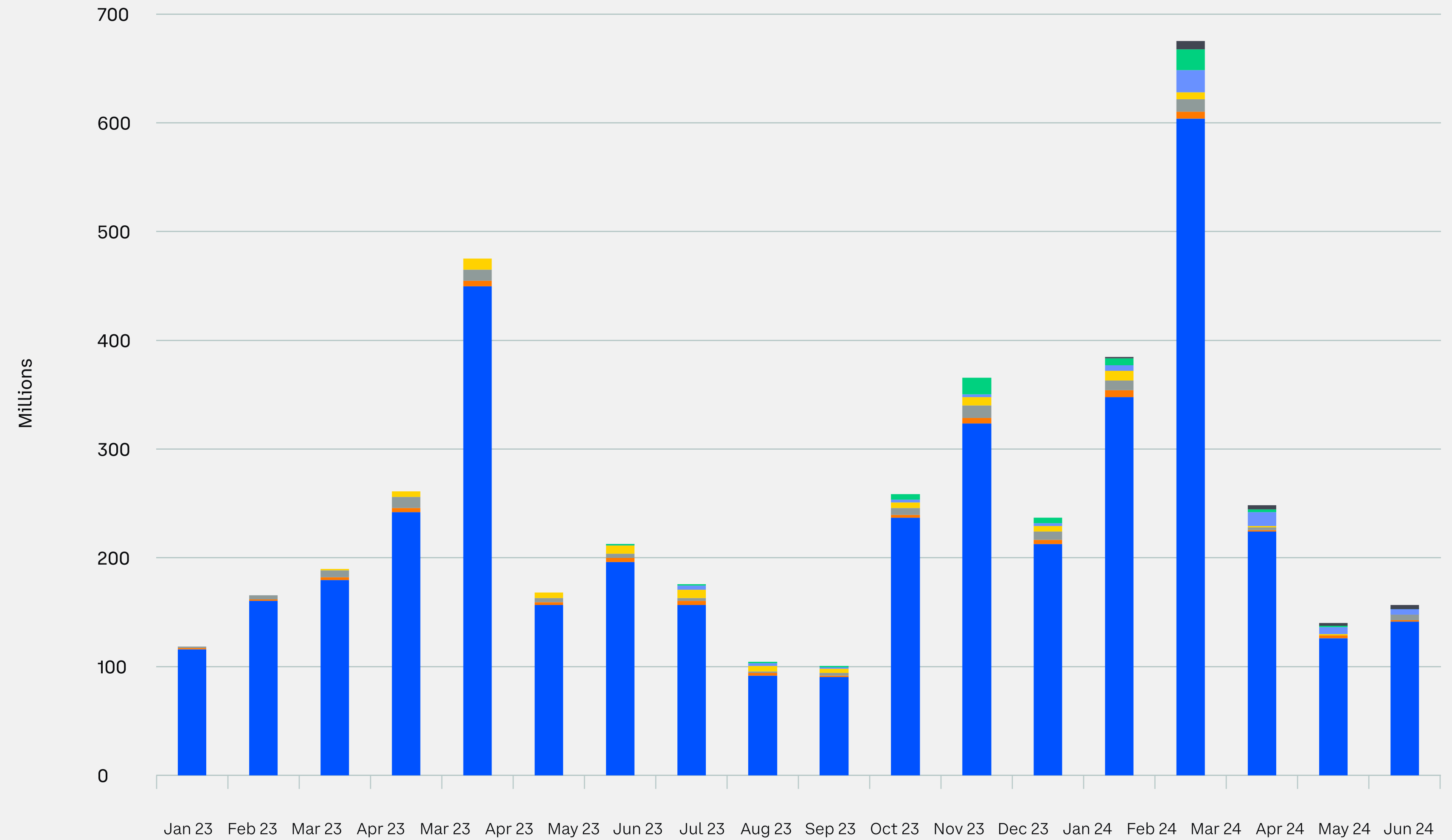
The number of transactions increased by 59% in the second quarter, with almost all of the growth taking place on Layer 2s.

Note: This metric attempts to capture only smart contracts, not system transactions.



# Ethereum & L2 Monthly User Fees

Total transaction fees dropped by 58% in the second quarter despite the number of transactions increasing by 59%, after Ethereum's Dencun upgrade in March 2024 drastically reduced fees per transaction.





# 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. A 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:CUR

### Circulating Supply

19.7 million

### % Supply in Circulation

94%

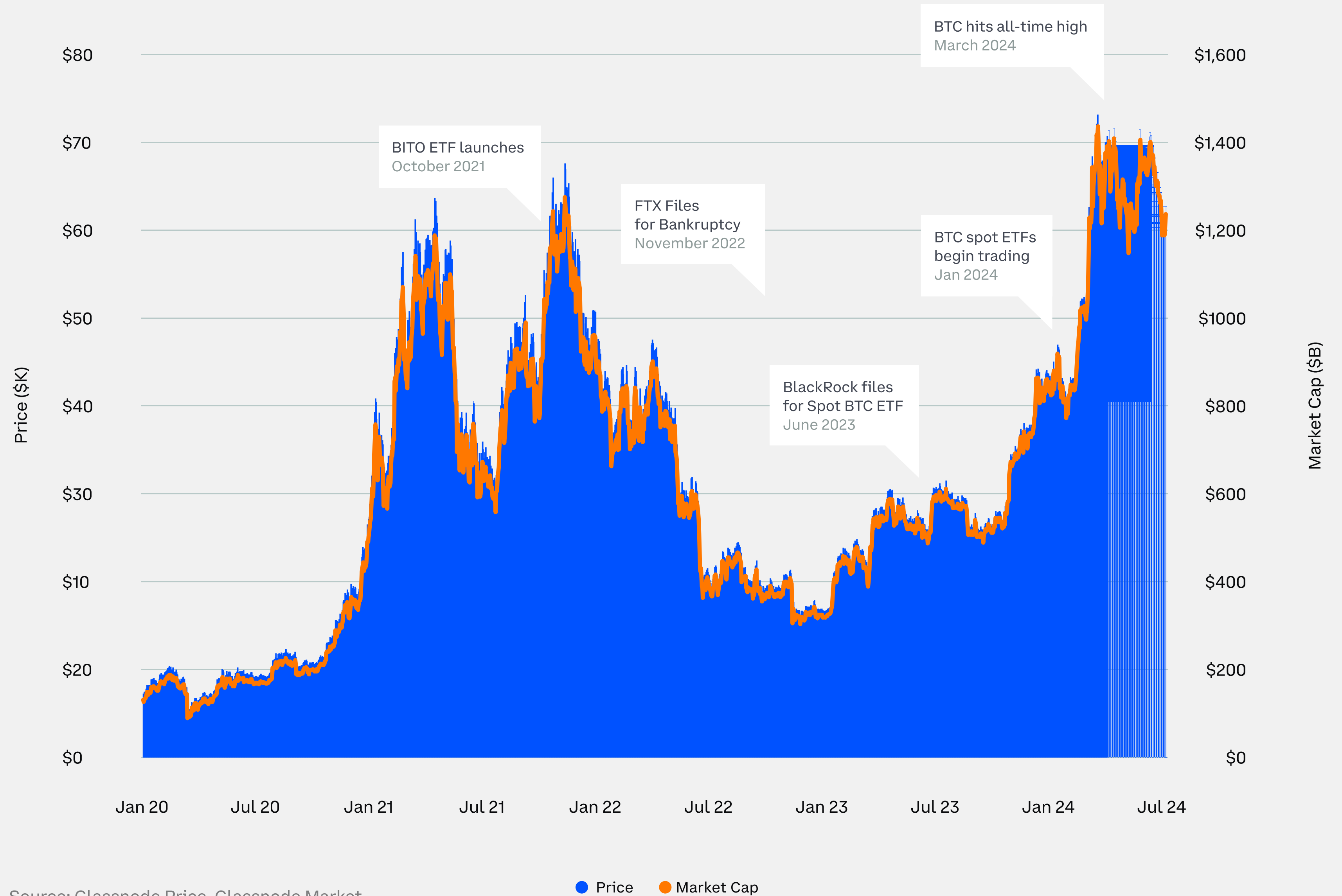
### Inflation Rate

0.70%

# BTC Price and Market Cap

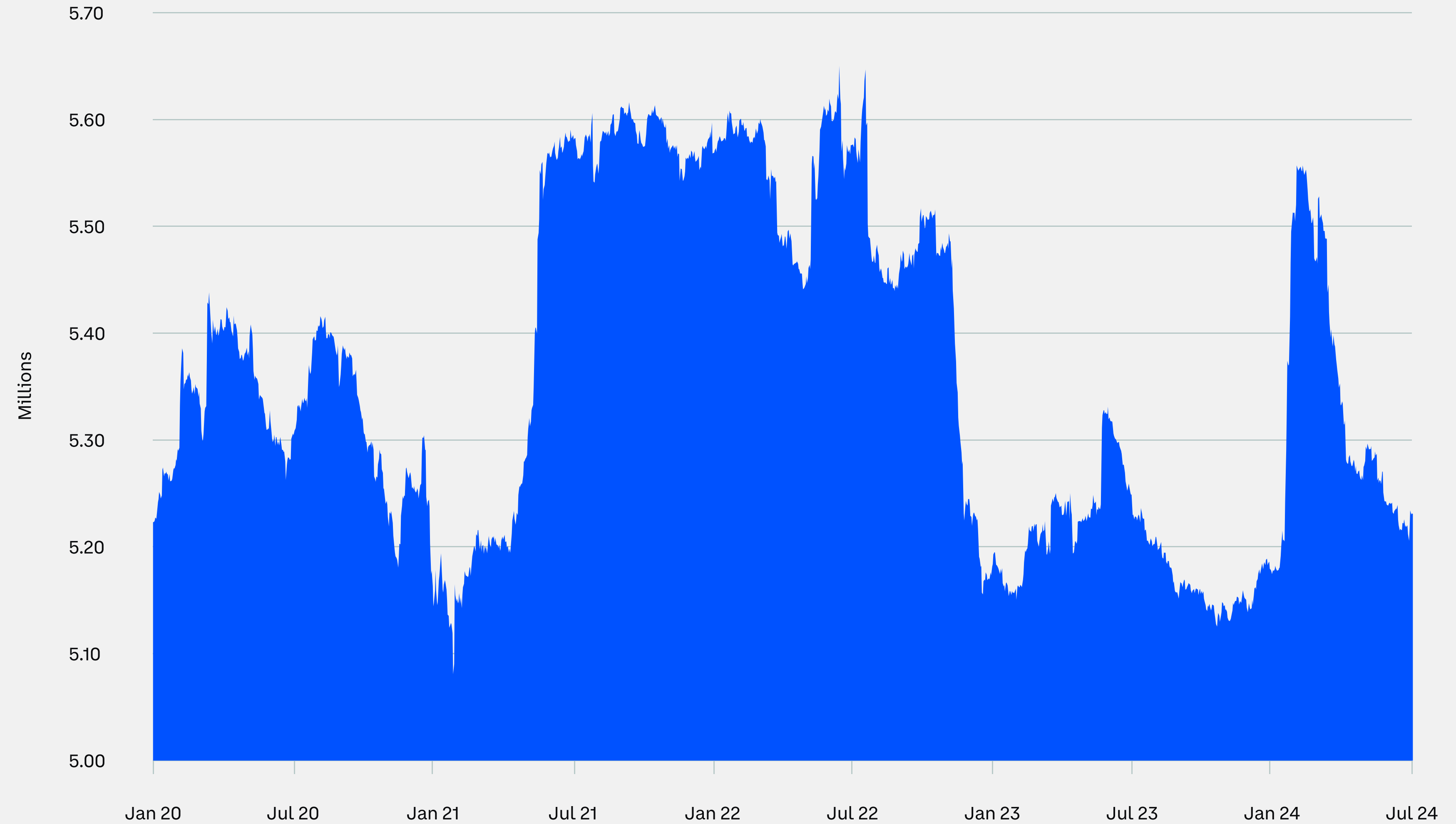
After rising nearly 70% in the first quarter on the back of record-setting ETF demand, BTC prices retreated by 12% in the second quarter.

## Bitcoin



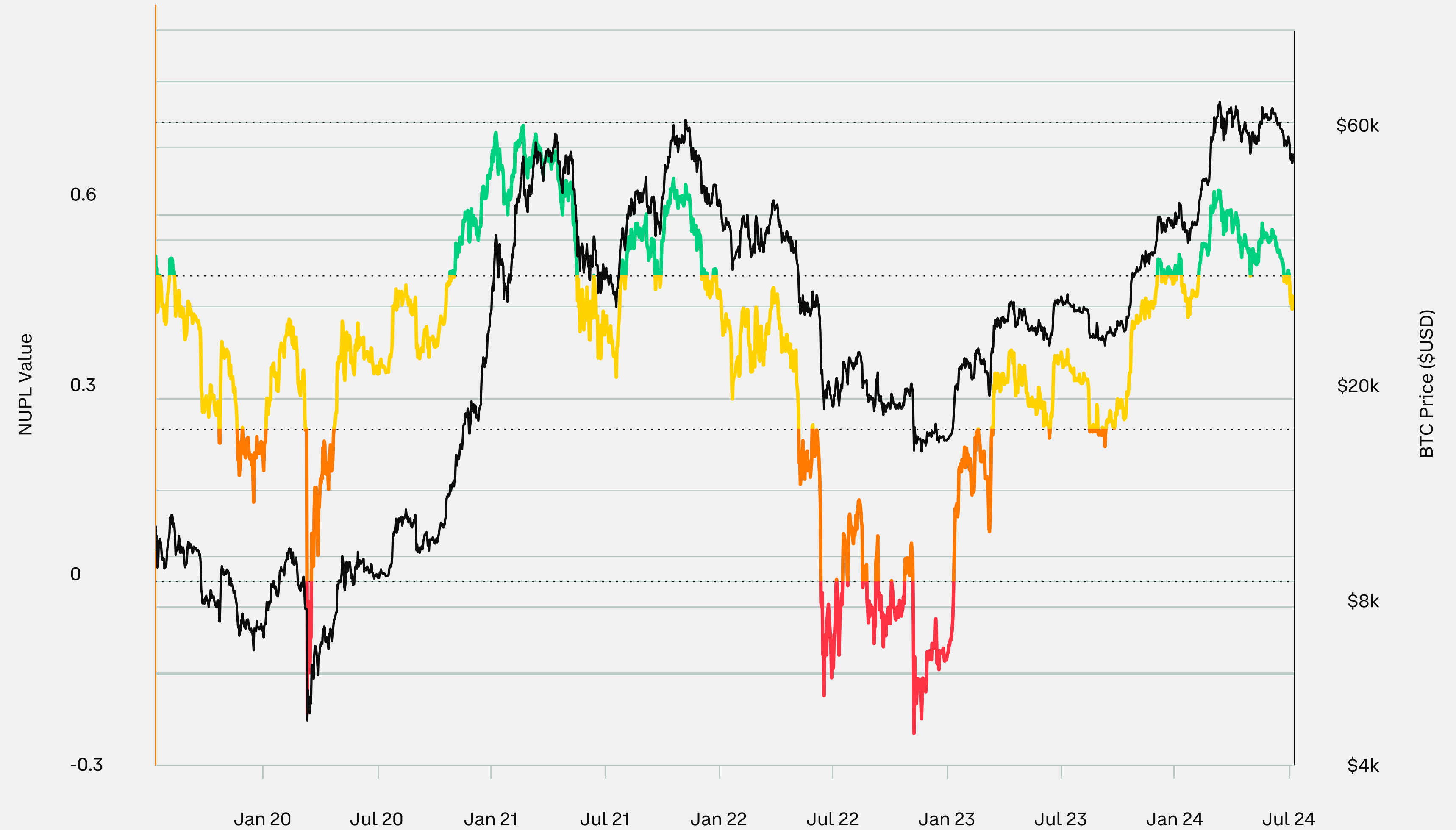
# BTC Available Supply

To measure the available bitcoin supply, we take the difference between the token's current circulating supply of 19.72M BTC and subtract the illiquid supply consisting of bitcoin that are largely unavailable for trading due to being in lost wallets, stuck in very long-term holdings, or otherwise locked up. The amount of available bitcoin supply peaked in mid 2022 at 5.65M BTC and has since fallen to around 5.23M BTC.



# BTC Entity-Adjusted NUPL (Fear and Greed)

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. Entity-adjusted NUPL discards transactions between addresses of the same entity ("in-house" transactions) to measure only real economic activity and provide an improved market signal compared to unadjusted NUPL. For more information, see this [article](#).



# BTC Supply Profitable State

The circulating supply of a cryptocurrency is comprised of supply in loss (all coins with a cost basis higher than the current spot price) and supply in profit (all coins with a cost basis lower than the current spot price). Looking at supply profitability can help shed light on where crypto prices are in the current market cycle, as previous crypto market cycles have been characterized by three phases:

### Bottom Discovery

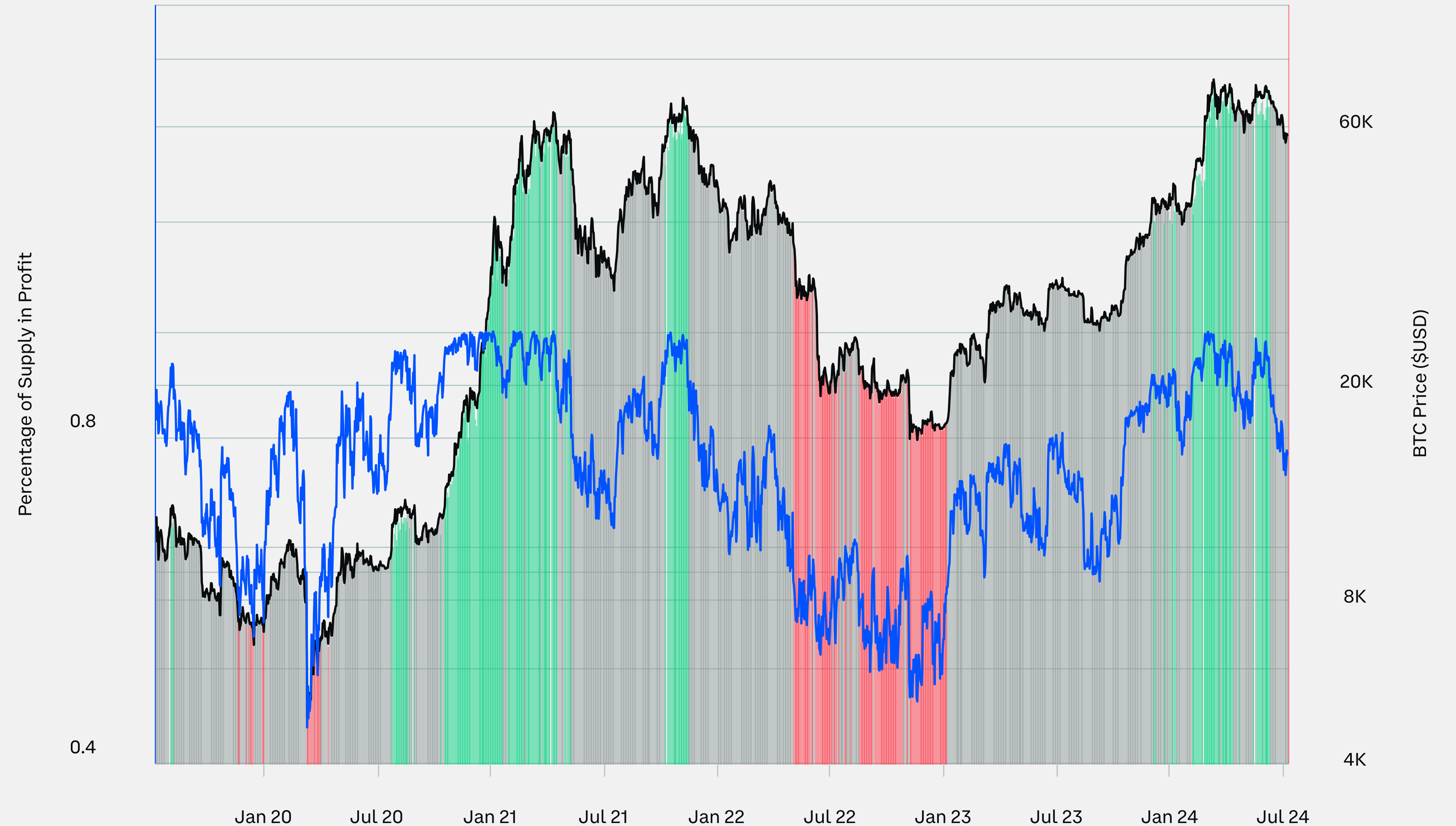
In the last stage of a bear market, when an extended period of price depreciation causes the share of supply in loss to rise (Percent of Supply in Profit < 55%).

### Euphoria

When a parabolic price uptrend is in play during a bull market, the share of supply in profit dominates (Percent of Supply in Profit > 95%).

### Bull/Bear Transition

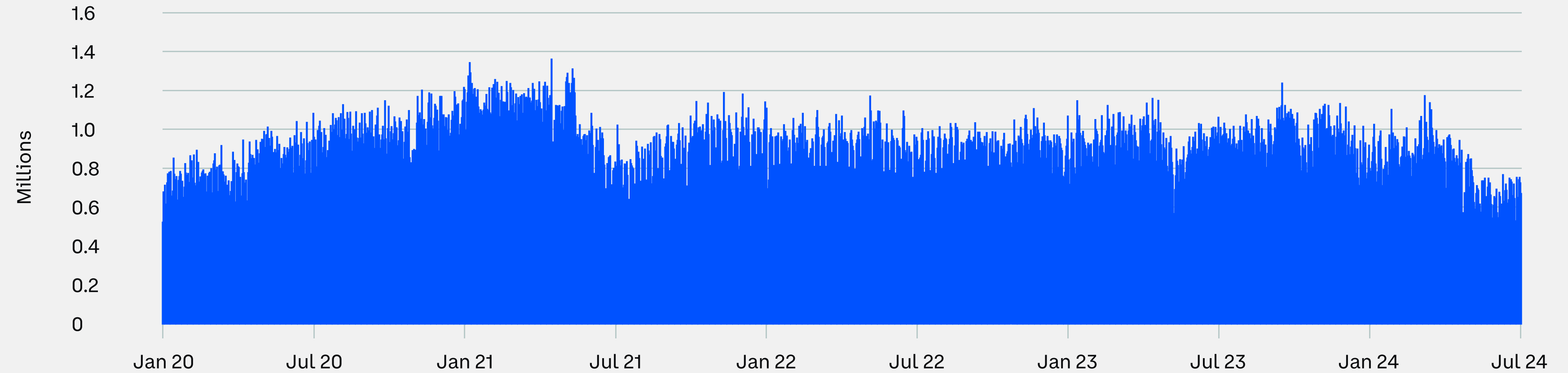
The transition periods between Bottom Discovery and Euphoria, when supply profitability is closer to equilibrium (Percent of Supply in Profit between 55% and 95%).



## BTC Daily Active Addresses

Active addresses are the number of unique addresses that were active in a network as either a sender or a receiver. They are an important metric that can be used to gauge user adoption, network health, economic activity, and more. The average number of daily active addresses fell 20% in the second quarter.

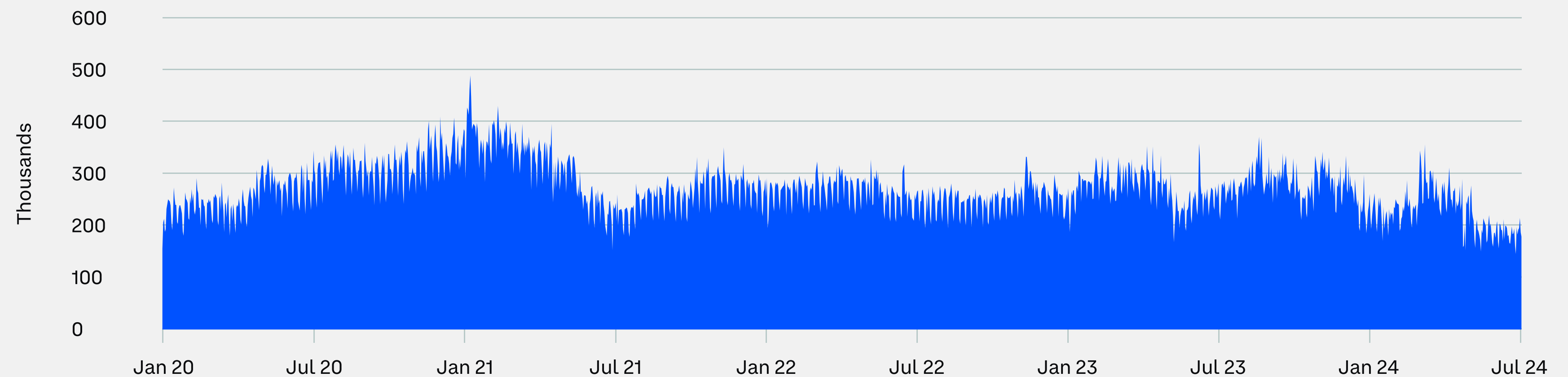
Bitcoin



## BTC Daily Active Entities

While active addresses are an important metric, a single entity can have multiple addresses, so we also look at the number of active entities. Entities are defined as a cluster of addresses that are controlled by the same network entity and are estimated through advanced heuristics and Glassnode's proprietary clustering algorithms. The average number of daily active entities fell 16% in the second quarter.

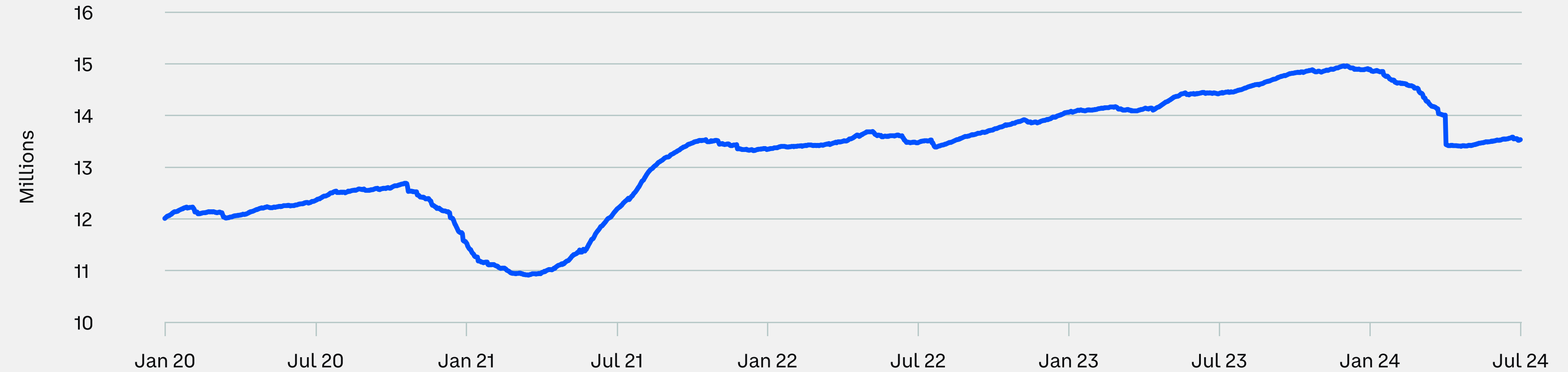
BTC Daily Active Entities



## BTC Total Supply Held by LT Holders

Long-term holders (LTHs), as defined by Glassnode, refers to investors who retain their cryptocurrency holdings for a minimum of 155 days. Historically, this duration marks the point beyond which the probability of these assets being sold decreases notably. The activity patterns of LTHs can be used as a barometer for identifying cyclical trends within the cryptocurrency markets, including potential peaks and troughs. The amount of BTC held by long-term holders dropped 3% in the first quarter as new participants continued to enter the market on the back of the successful launch of spot ETFs.

Bitcoin



## BTC Annualized 3-Month Volatility

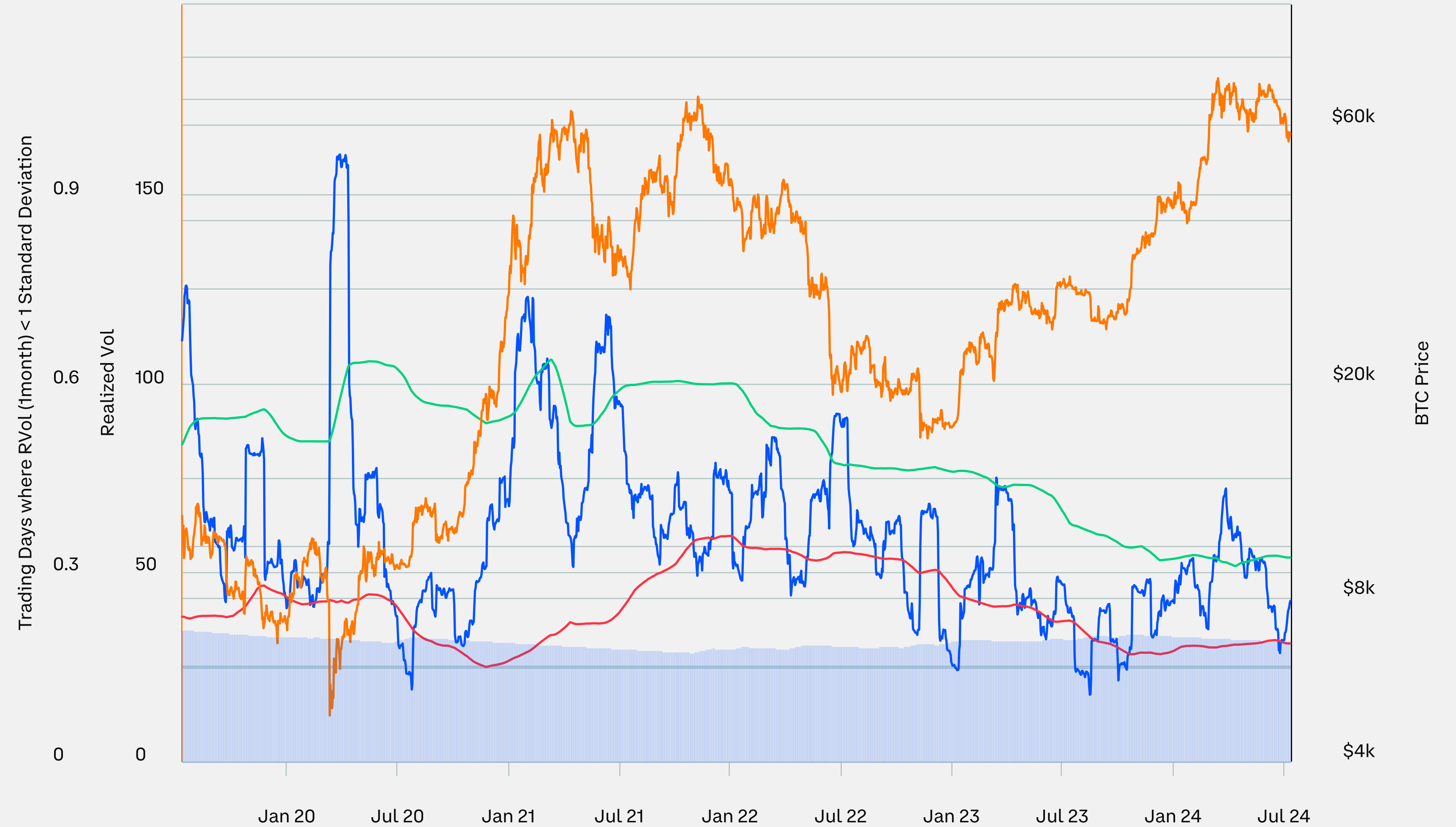
After increasing 35% in the first quarter as prices shot up to an all-time high and then pulled back, volatility fell by 18% in the second quarter as BTC settled into a trading range.

BTC Annualized 3 Month Volatility



# BTC Monthly Realized Volatility Bands

This chart applies Bollinger Bands to one-month realized volatility to identify potential turning points in the prevailing volatility backdrop. When volatility is one standard deviation above or below the one-month average, it may signal that a reversal is more likely.





# BTC Realized Price and MVRV

Realized Price is the average price of a cryptocurrency's supply, valued on the day each coin last transacted onchain; it is often considered the onchain cost basis of the market. MVRV is short for Market Value to Realized Value; it is the ratio between the market value (spot price) and the realized value (realized price).

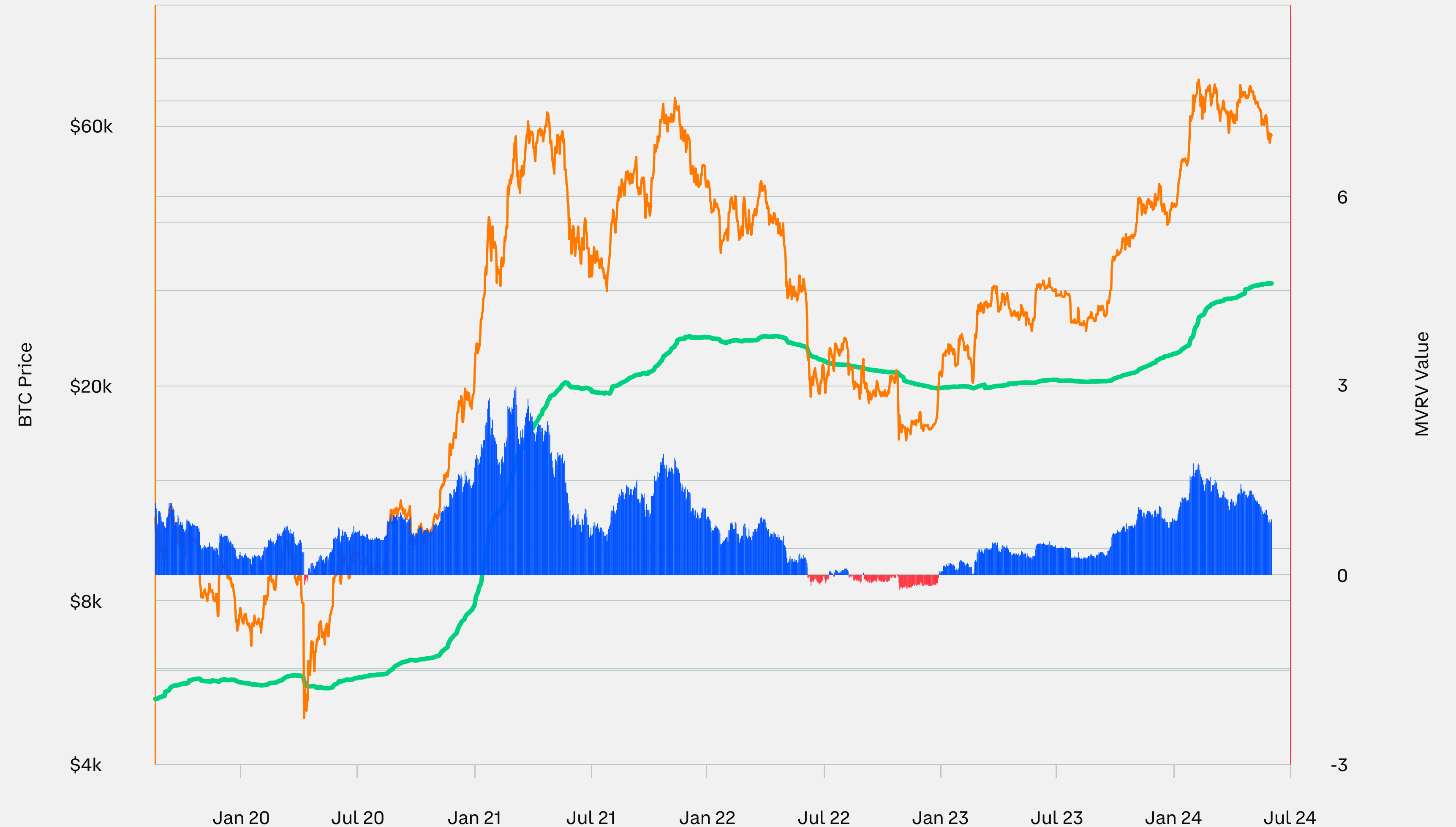
An MVRV of 2.0 means the current price is 2x the market's average cost basis (average holder is up 2x).

An MVRV of 1.0 means the current price is equal to the market's average cost basis (average holder is at break-even).

An MVRV of 0.50 means the current price is -50% below the market's average cost basis (average holder is underwater by -50%).

Extreme MVRV values can help identify periods where the market is overheated, or undervalued, and where investor profitability has reached a large deviation from the mean (realized price).

For more on the MVRV ratio, see [this article](#).



Source: Glassnode

● BTC: Realized Price [USD] ● BTC: Price [USD] ● BTC: Price [USD] ● MVRV > 1 (In Profit) ● MVRV < 1 (In Loss)

# BTC Derivative Summary Stats

Market participants use bitcoin derivatives for a variety of reasons, including gaining capital-efficient access to BTC, hedging spot exposure, mitigating mining risks, and hedging other tokens that don't have liquid and regulated derivatives. For more on hedging, see [Hedging cryptocurrencies with futures: A look at common use cases](#).

# Q2 2024 Daily Averages

Futures volume

\$41.7B

Futures open interest

\$28.0B

Perp funding rate

6.82%

Options open interest (weekly)

\$18.3B

# BTC Traditional Futures Specs

Bitcoin futures are offered by a variety of exchanges in different sizes and denominations.

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

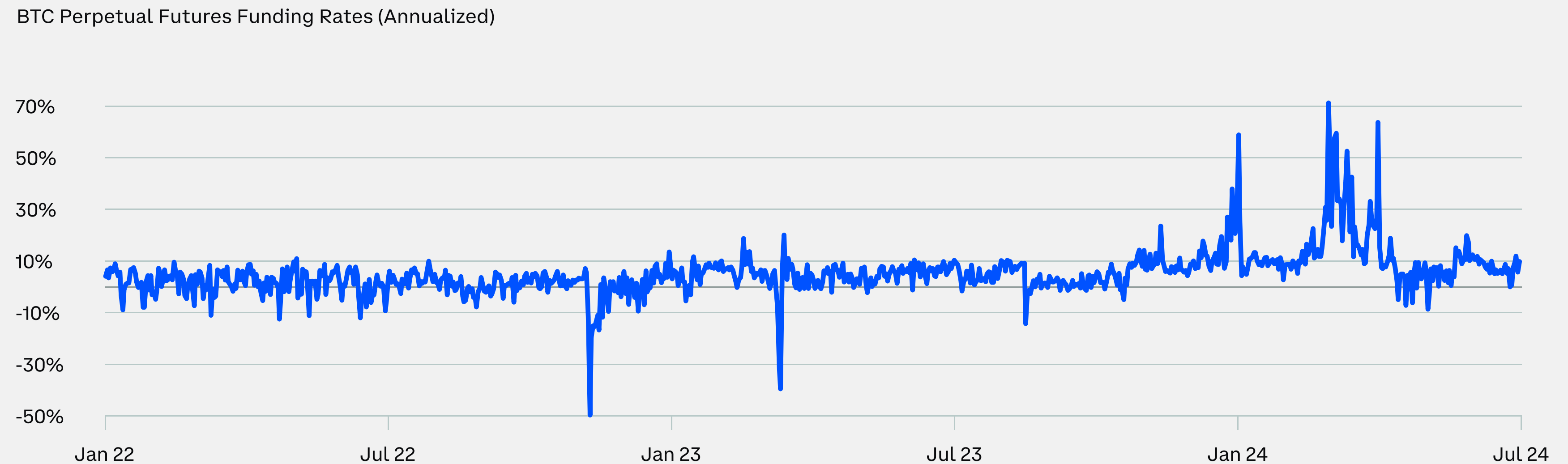
## BTC Futures Annualized Rolling Basis (3M)

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.



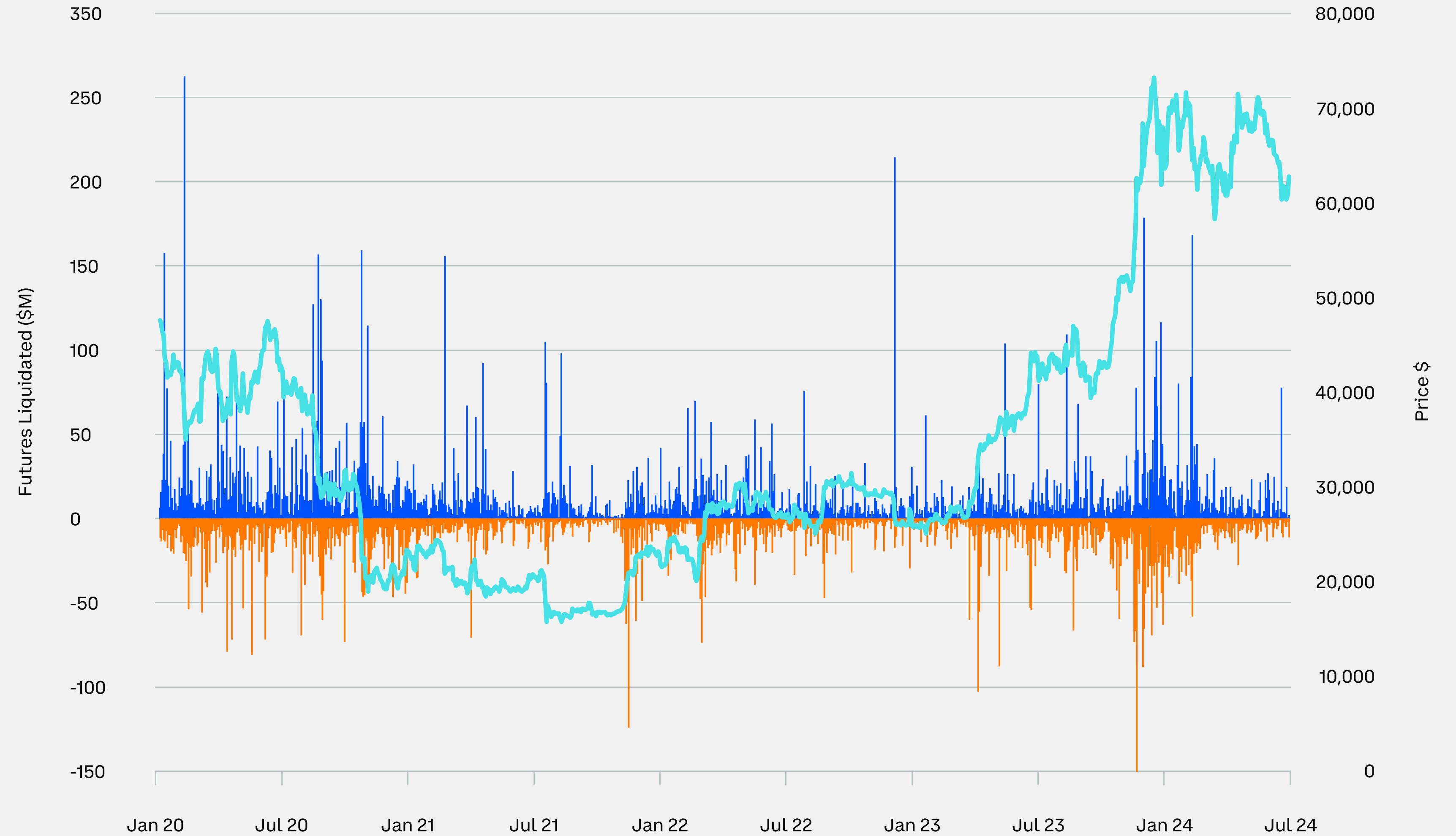
## BTC Perpetual Futures Funding Rates (Annualized)

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. Funding rates slipped to an average of 9.27% in the second quarter as the price of bitcoin fell.



# BTC Perpetual Futures Liquidated

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.



# BTC Upcoming Market Events

## Mt. Gox and FTX Distributions

Former crypto exchanges Mt. Gox and FTX will both be distributing assets to former customers, but the dynamics of the two distributions are quite different. The Mt. Gox trustee has just begun to distribute some of the 142k bitcoin that it holds, which sparked fears of a supply shock among some market participants. However, the full distribution may take up to three months to complete, and not all claimants are likely to sell their BTC. We believe the supply can be easily absorbed by the market, and that the effects are mainly sentiment-driven.

Meanwhile, FTX will distribute cash, not crypto, to approved claimants. Given that the claimants include many large crypto firms, the distributions could cause some meaningful inflows if participants decide to redeploy into the asset class. Key dates to watch are August 16, when trustees will vote on the distribution plan, and October 7, which is the deadline for the court to approve the distribution plan.

# 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 developed 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:CUR

### Total Value Locked Q2 2024 Average

\$57.5 billion

### Supply in Circulation

119.9 million

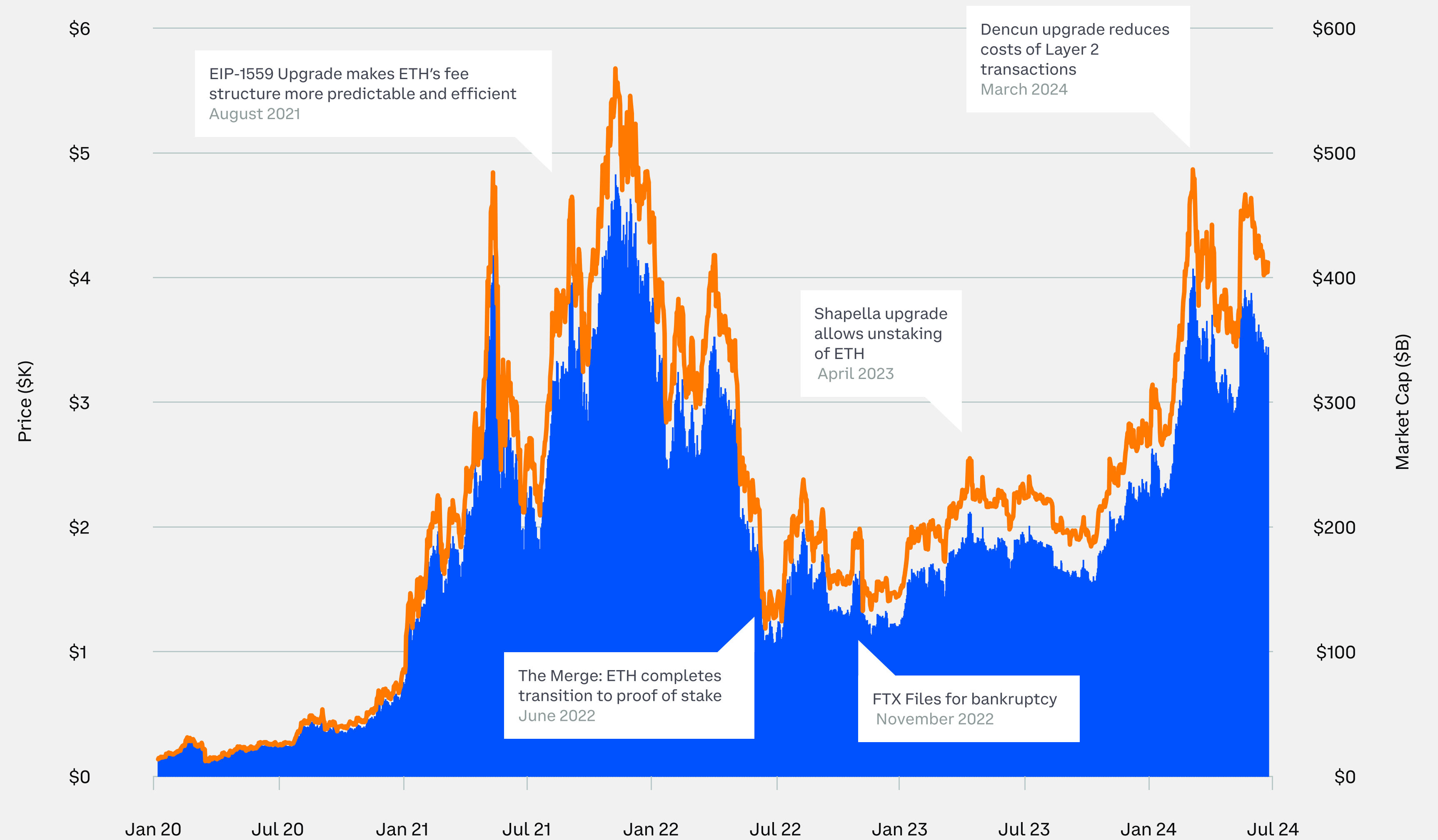
### Inflation Rate

0.71%

# ETH Price and Market Cap

The price of ETH fell 6% in the second quarter, but it outperformed bitcoin on optimism about the prospect for spot ether ETFs and the utility of the Ethereum blockchain.

## Ethereum



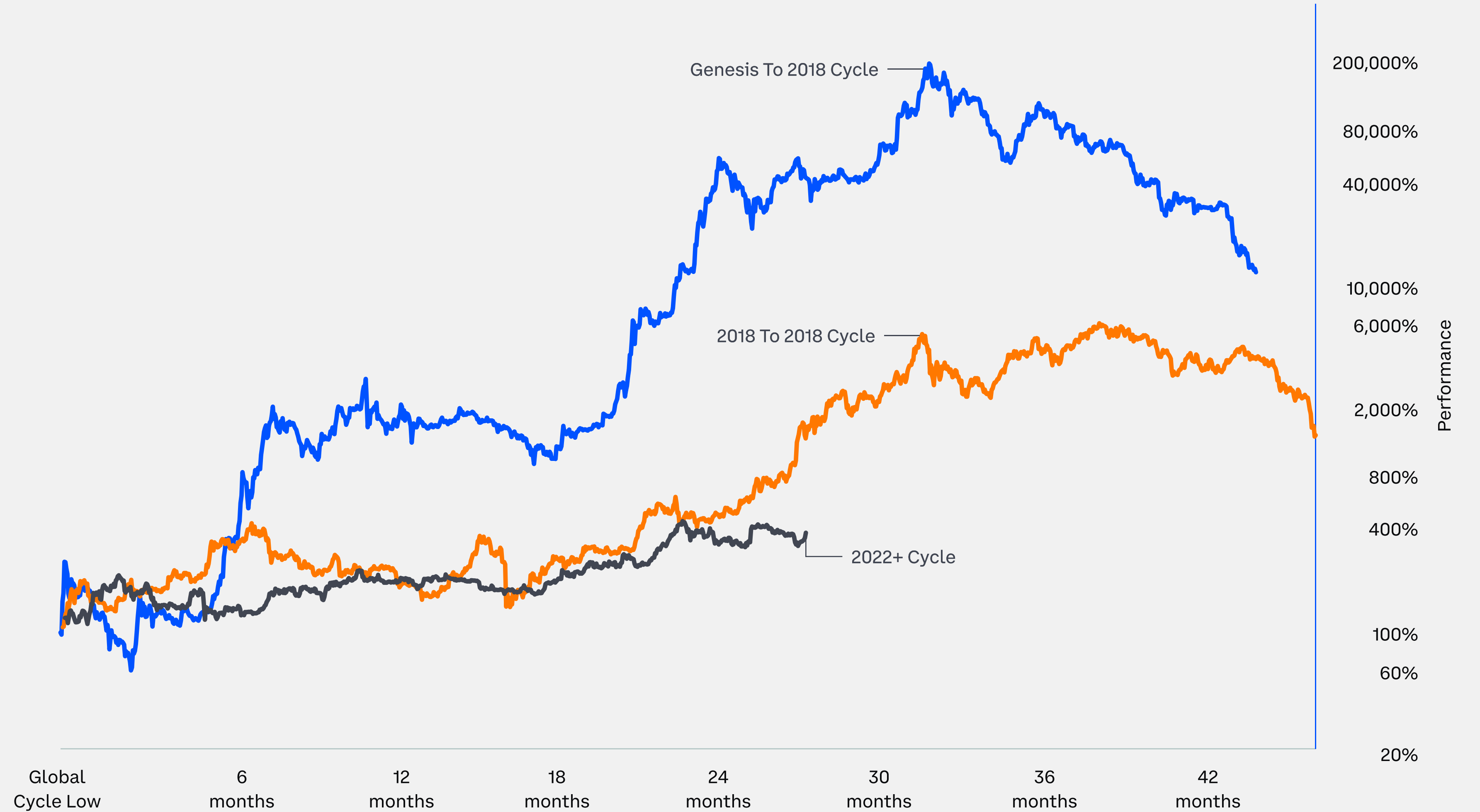


# ETH Price Performance Since Cycle Low

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 240%+ since hitting its cycle low in November 2022.

The current cycle most closely resembles the one from 2018-2022, which saw ETH hit a high that was up 6,000% from the cycle low.

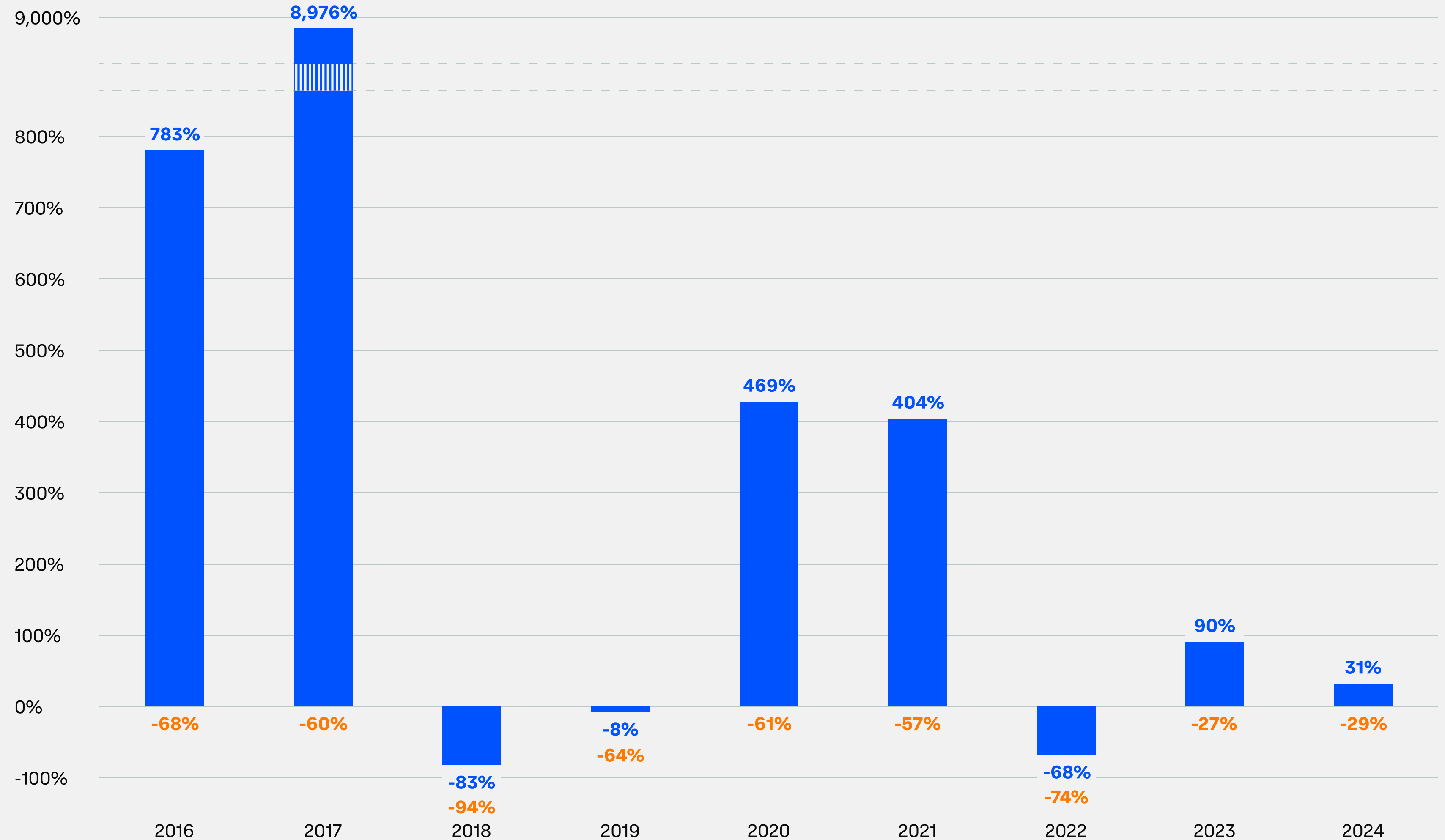


# ETH Annual Returns and Drawdowns

Despite average intra-year declines of 59%, ether has delivered positive returns in five of the last eight years.

The 29% drawdown that we saw in the first half of 2024 pales in comparison to the magnitude of the drawdowns that marked the end of previous bull cycles, indicating that this cycle may have further to run.

Ethereum

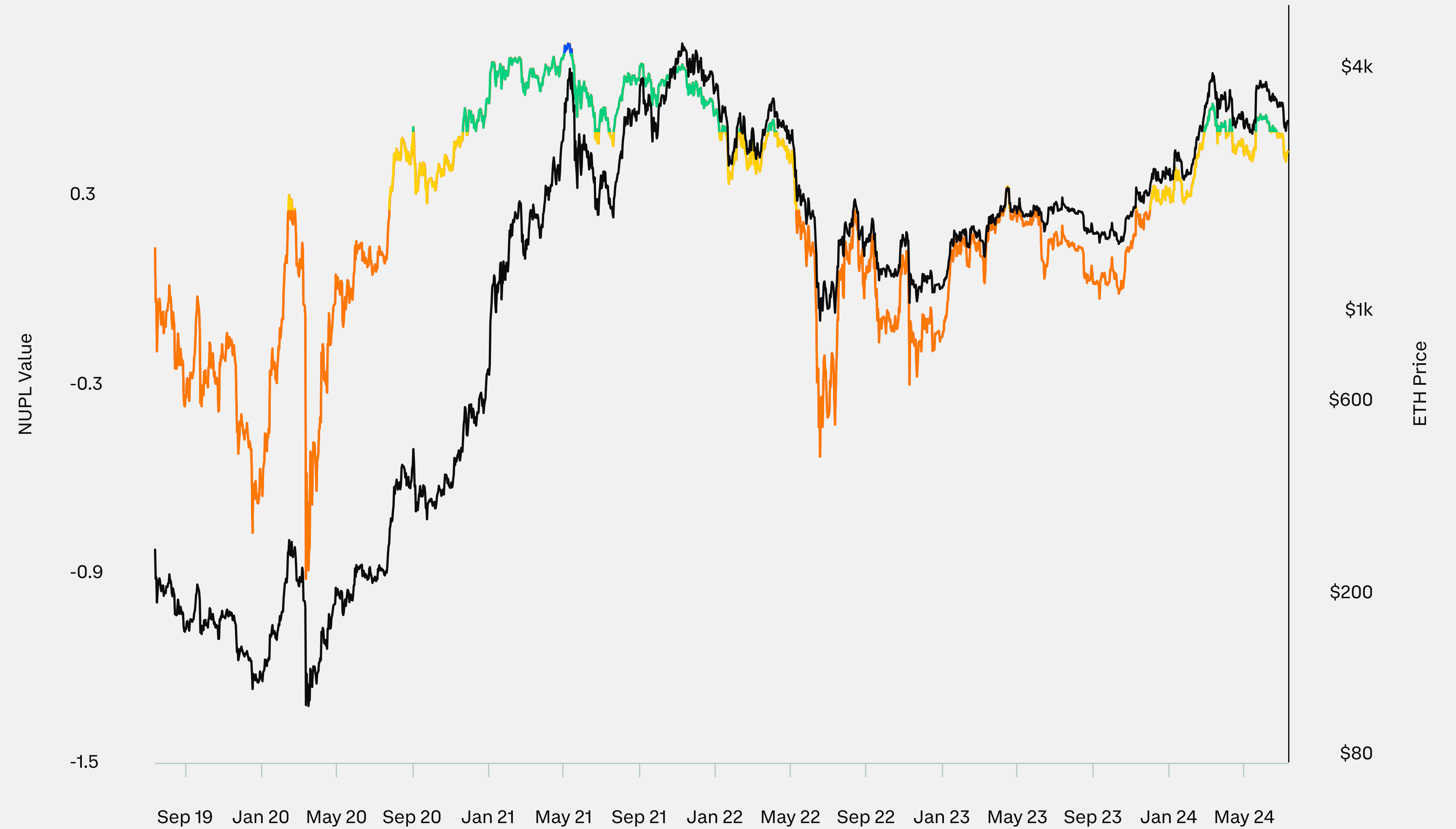


Source: Glassnode

● Return ● Max Drawdown

# ETH Net NUPL (Fear and Greed)

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. For more information see this [article](#).



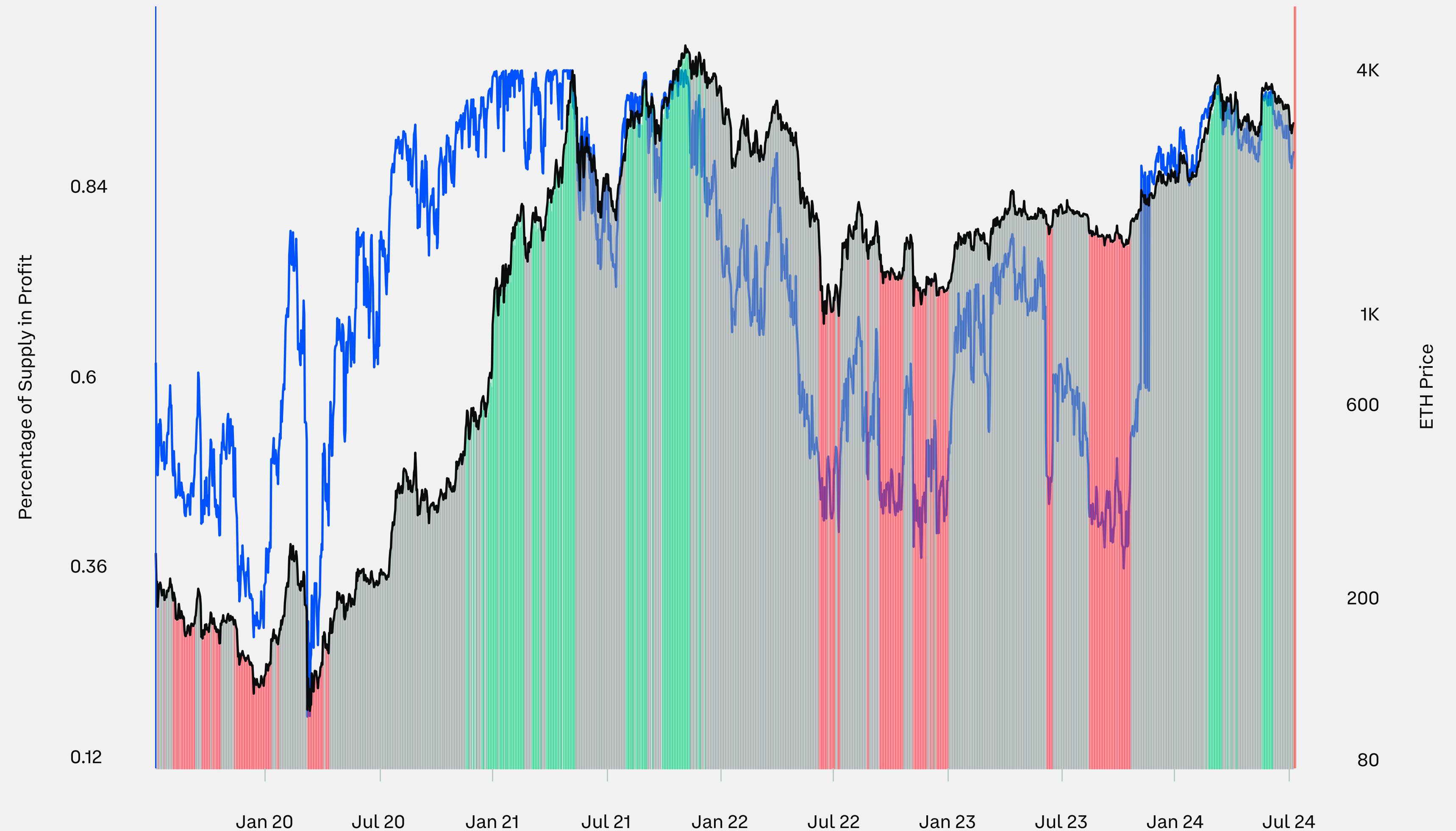
# ETH Supply Profitability State

The circulating supply of a cryptocurrency is comprised of supply in loss (all coins with a cost basis higher than the current spot price) and supply in profit (all coins with a cost basis lower than the current spot price). Looking at supply profitability can help shed light on where crypto prices are in the current market cycle, as previous crypto market cycles have been characterized by three phases:

**Bottom Discovery:** In the last stage of a bear market, when an extended period of price depreciation causes the share of supply in loss to rise (Percent of Supply in Profit < 55%).

**Euphoria:** When a parabolic price uptrend is in play during a bull market, the share of supply in profit dominates (Percent of Supply in Profit > 95%).

**Bull/Bear Transition:** The transition periods between Bottom Discovery and Euphoria, when supply profitability is closer to equilibrium (Percent of Supply in Profit between 55% and 95%).



# ETH Annualized 3-Month Volatility

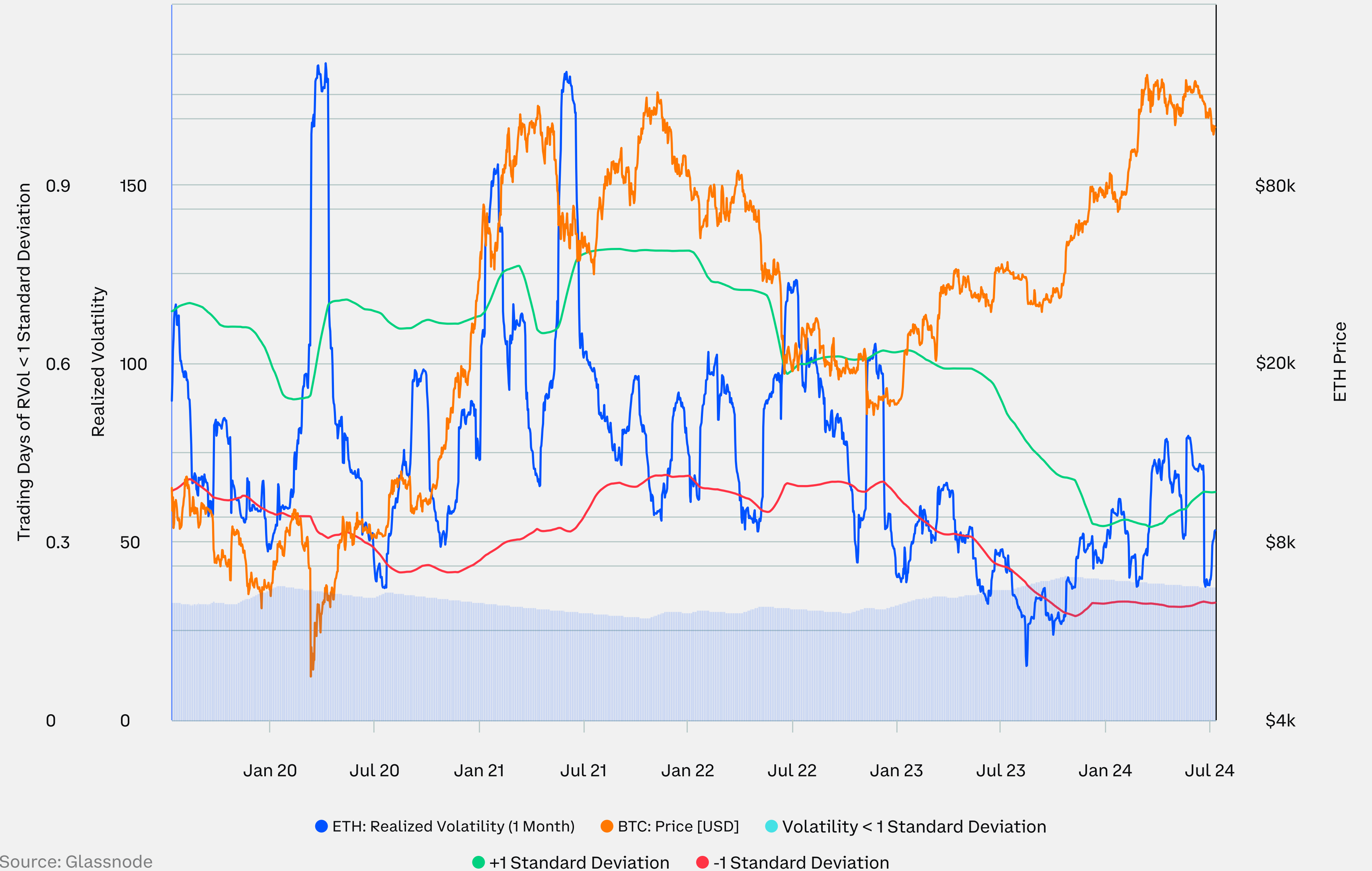
After trending lower for several years as crypto has matured as an asset class, ETH volatility increased 8% in the second quarter.

Ethereum



# ETH Monthly Realized Volatility Bands

This chart applies Bollinger Bands to one-month realized volatility to identify potential turning points in the prevailing volatility backdrop. When volatility is one standard deviation above or below the one-month average, it may signal that a reversal is more likely.



# ETH Realized Price and MVRV

Realized Price is the average price of a cryptocurrency's supply, valued on the day each coin last transacted onchain; it is often considered the onchain cost basis of the market. MVRV is short for Market Value to Realized Value; it is the ratio between the market value (spot price) and the realized value (realized price).

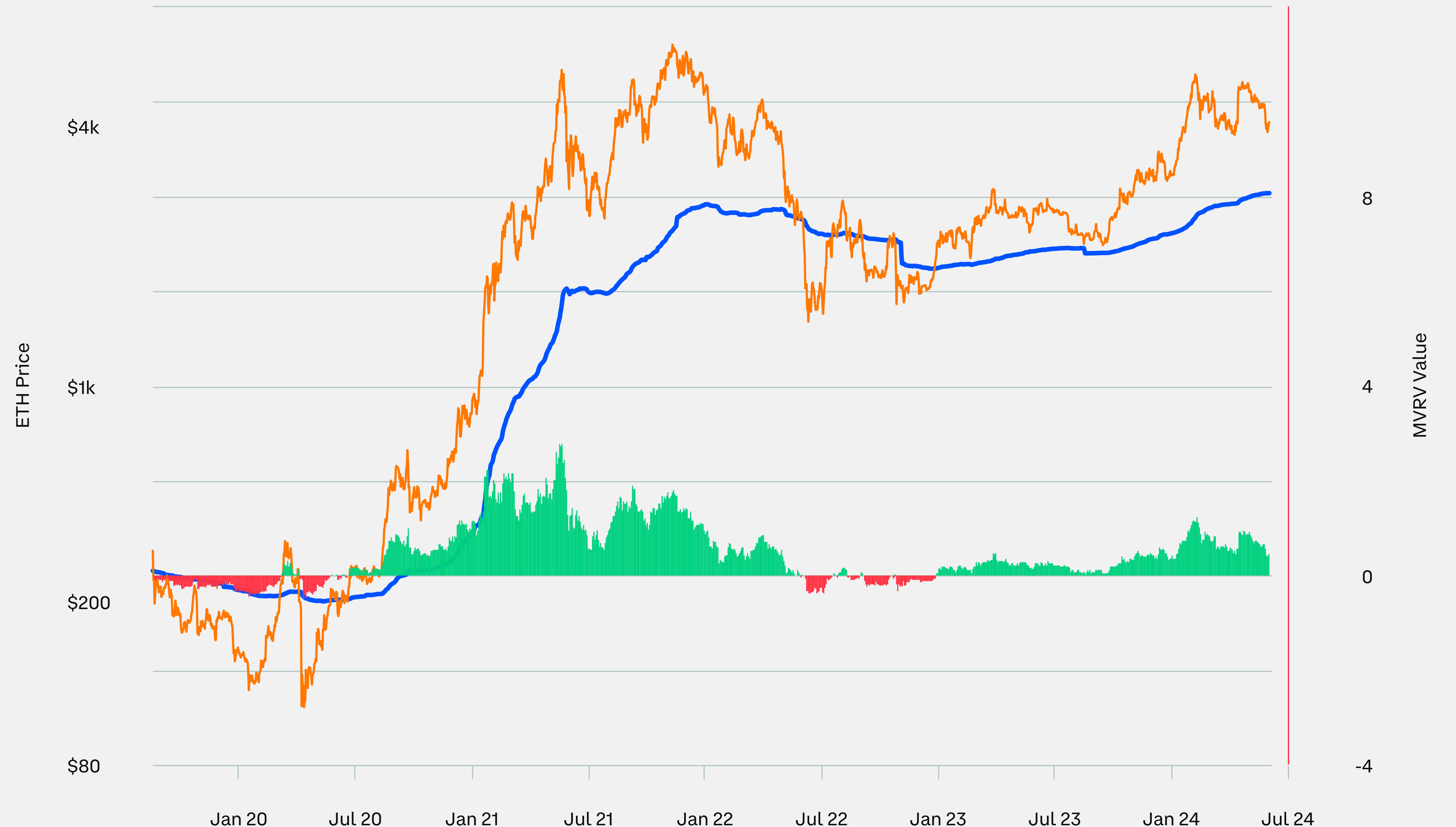
An MVRV of 2.0 means the current price is 2x the market's average cost basis (average holder is up 2x).

An MVRV of 1.0 means the current price is equal to the market's average cost basis (average holder is at break-even).

An MVRV of 0.50 means the current price is -50% below the market's average cost basis (average holder is underwater by -50%).

Extreme MVRV values can help identify periods where the market is overheated or undervalued, and where investor profitability has reached a large deviation from the mean (realized price).

For more on the MVRV ratio, see [this article](#).



# ETH MVRV Momentum

This chart shows the MVRV ratio alongside the six-month simple moving average (SMA), which is used as a gauge for momentum. Periods where MVRV is above the six-month SMA typically describe macro market uptrends, and periods where it is below typically describe downtrends.

Cycle transition points are often characterized by MVRV breaking strongly across the six-month SMA. Strong breaks above the SMA indicate large volumes of ETH were acquired below the current price, and strong breaks below indicate large volumes of ETH were acquired above the current price.

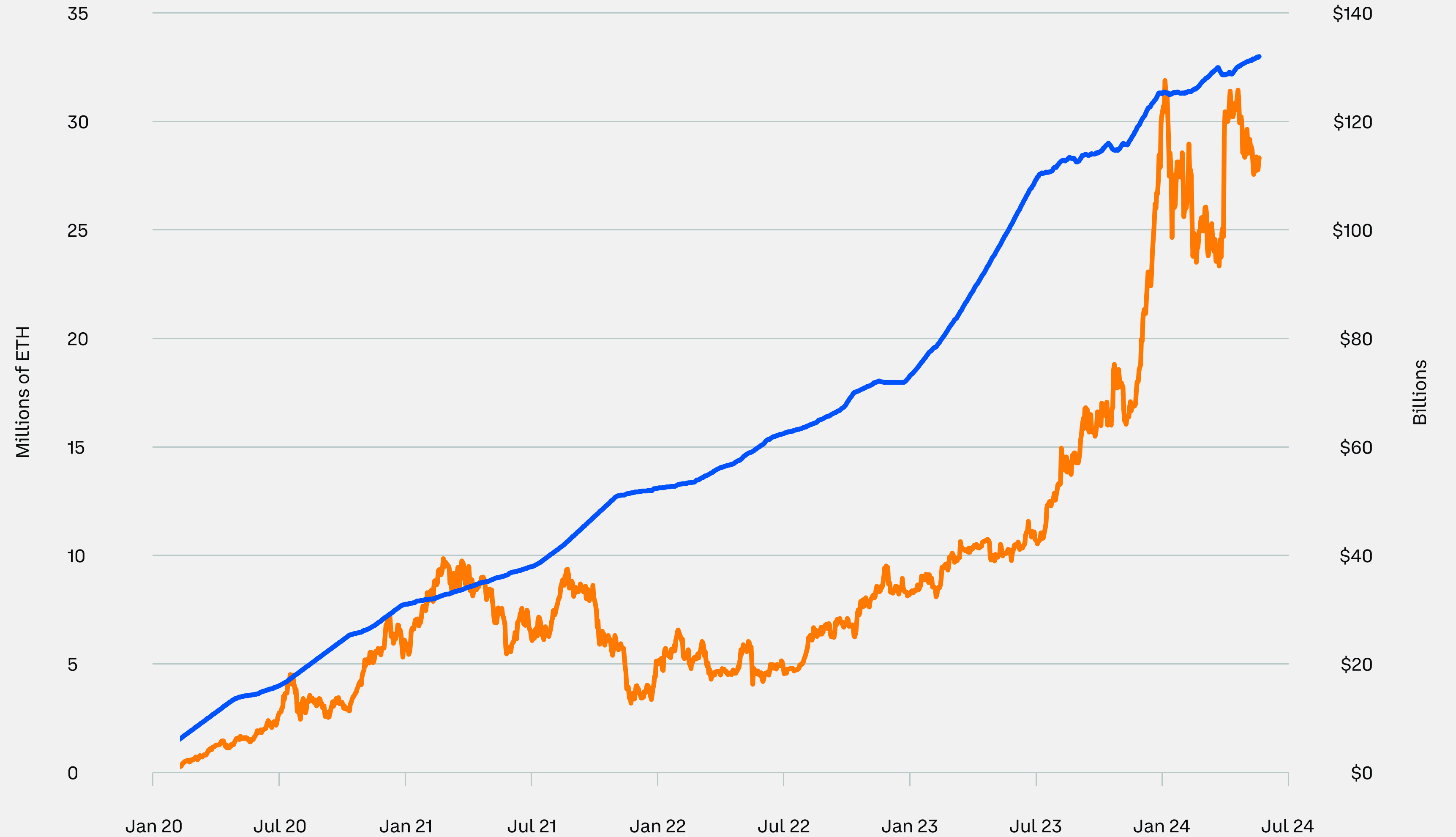




# ETH Total Value Staked

Staking is an investment feature of Proof of Stake (PoS) 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. The amount of staked ETH rose 5% in the second quarter as more holders looked to generate yield from their assets. For more on staking see ["Staking 101 for Institutions,"](#) ["Growth of the Liquid Staking Market,"](#) and ["Ethereum Staking in Regulated Vehicles."](#)

## Ethereum



# ETH Total Value Locked in DeFi

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. TVL increased by 9% in the second quarter as activity on the Ethereum blockchain continued to gather pace.

Ethereum



# ETH Derivatives

Market participants use ether derivatives for a variety of reasons, including gaining capital-efficient access to ETH, hedging spot exposure, and hedging staked positions in ETH or in other tokens that don't have liquid and regulated derivatives. For more on hedging, see [Hedging cryptocurrencies with futures: A look at common use cases](#).

## Q2 2024 Daily Averages

Futures volume

\$20.1B

Futures open interest

\$9.7B

Perp funding rate

9.08%

Options open interest (weekly)

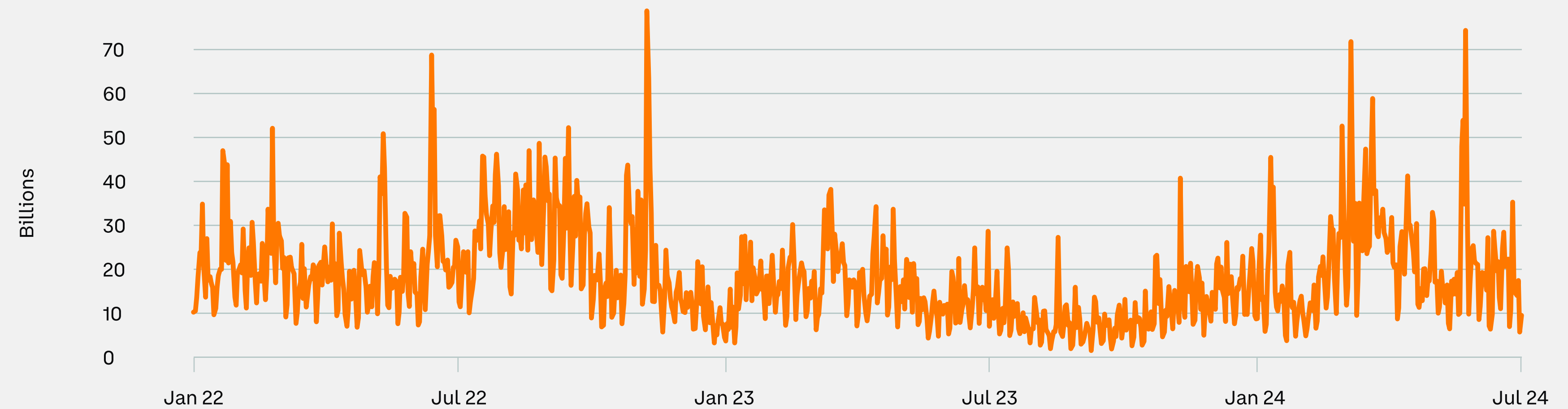
\$8.5B

# ETH Perpetual Futures Volume

Volume in crypto futures is split between traditional futures, also known as term or calendar futures, and perpetual futures (perps), which are unique to crypto. Perps do not have an expiration date, so holders do not need to roll their contracts. Volume in ETH futures is dominated by perps. After rising by 69% in the first quarter, the average daily volume in ETH perps slipped by 8% in the second quarter.

# ETH Perpetual Futures Open Interest

Open interest in ETH futures is also dominated by perps, with very little activity in traditional futures thus far. Open interest hit a new all-time high in the second quarter, and average daily open interest rose by 37% compared to the first quarter, as ETH derivatives markets continued to mature.



ETH Perpetual Futures Open Interest



# ETH Futures Annualized Rolling Basis (3M)

The basis in crypto markets has historically been positive most of the time. Extreme moves in the basis, both positive and negative, tend to be associated with large swings in sentiment. After a big spike to end the first quarter, ETH basis tightened considerably in Q2.

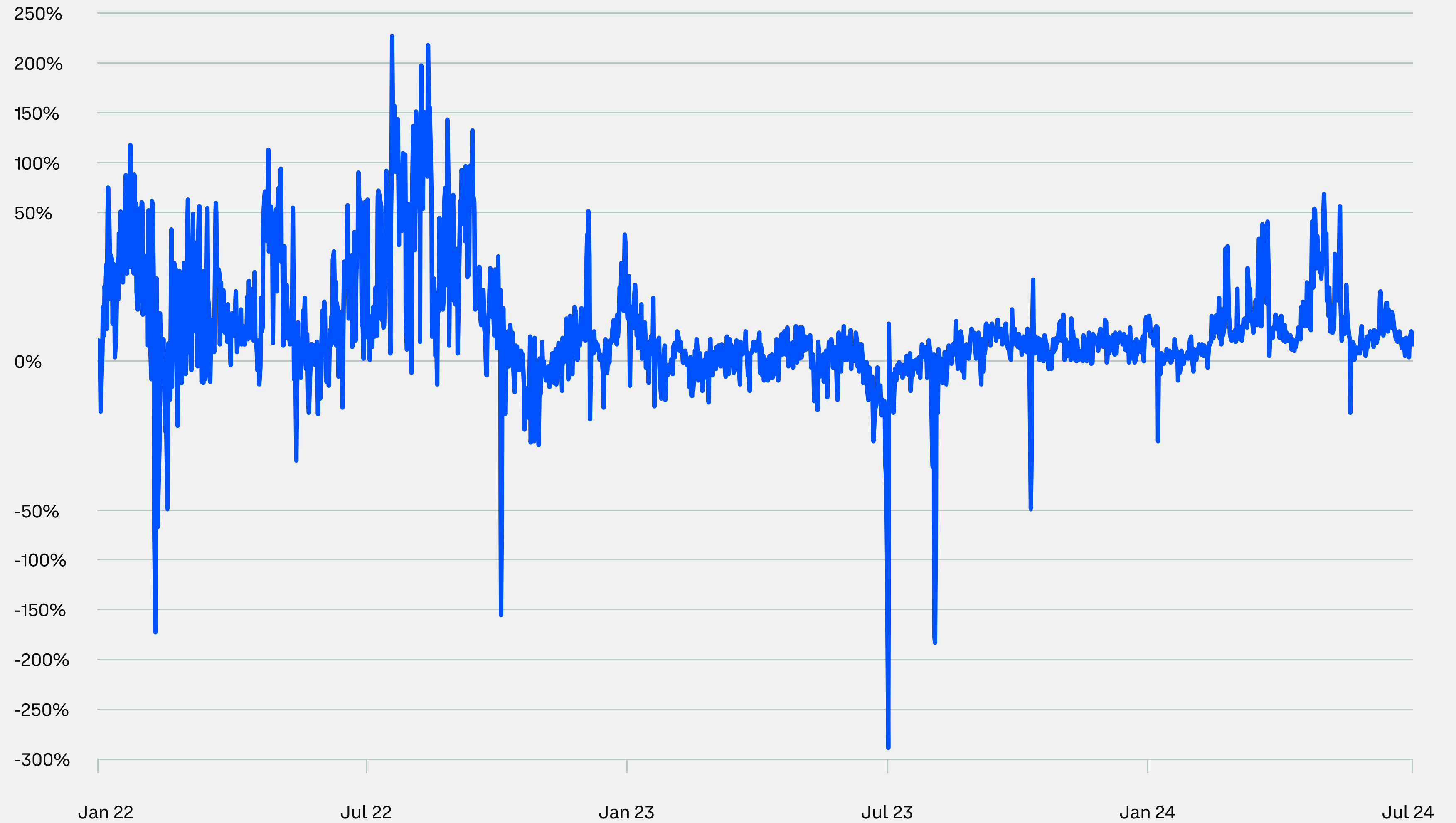
Ethereum



# ETH Perpetual Futures Funding Rates (Annualized)

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. The average funding rate dipped to 9.08% in the second quarter as the price of ETH fell.

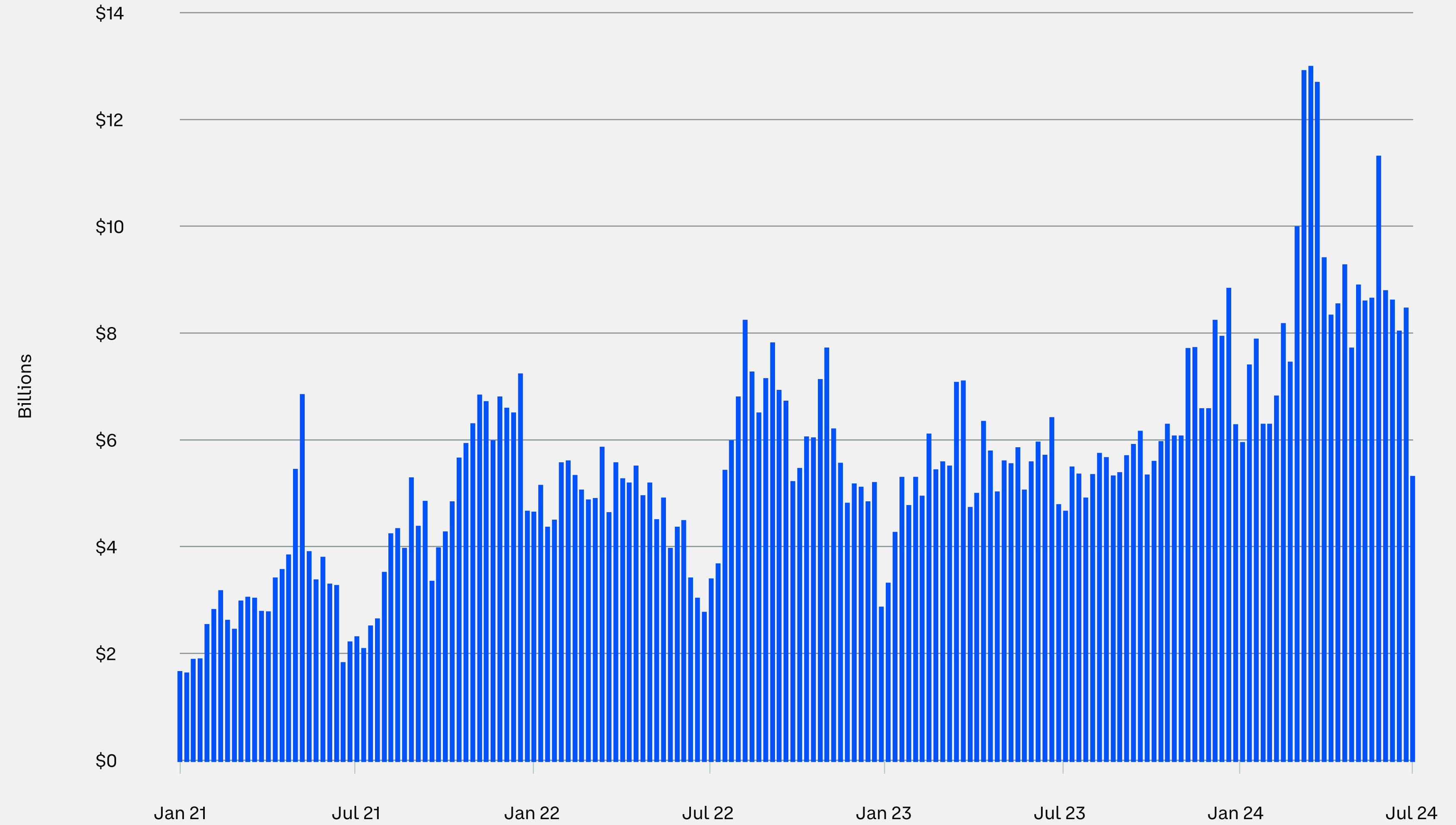
Ethereum



Source: Glassnode

# ETH Options Open Interest (Weekly)

After hitting a new all-time high in the first quarter, ETH options weekly average open interest slipped 3% in the second quarter, while the price of ETH fell 6%.



# ETH Upcoming Market Events

## Pectra Upgrade

Following the success of Dencun in 2023, Pectra is the next big upgrade scheduled for the Ethereum network. Pectra includes several enhancements, including the ability for individual validators to stake a maximum of 2,048 ETH—up from the current limit of 32—and will enable Ethereum addresses to temporarily act as smart contract wallets.



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