

Q2 2025 Signals Report

By Fidelity Digital Assets[®] Research

Quarterly Observation of Current Market Conditions

Click a box to see a breakdown of each time horizon.

BITCOIN

Short-Term Outlook
(<1 year)

POSITIVE

Mid-Term Outlook
(1–5 years)

POSITIVE

Long-Term Outlook
(>5 years)

NEUTRAL

ETHEREUM

Short-Term Outlook
(<1 year)

NEGATIVE

Mid-Term Outlook
(1–5 years)

POSITIVE

Long-Term Outlook
(>5 years)

POSITIVE

Executive Summary 3

Bitcoin 3

Ethereum 4

Bitcoin 5

Measurement Breakdown 5

Golden Cross: There and Back Again 6

Realized Price 7

Net Unrealized Profit/Loss (NUPL) Ratio 8

MVRV Z-Score 9

Reserve Risk 10

Puell Multiple 11

Percentage of Bitcoin Sold vs. Accumulated by Miners 12

Hash Rate 13

Miner Revenue Denominated in BTC vs. USD 14

Bitcoin continued

Long-Term Holder Net Position Change 15

Percent of Addresses in Profit 16

Bitcoin Yardstick 17

Bitcoin Price Phases 18

200-Week Moving Average 19

Monthly Address Metrics 20

New Address Momentum 21

Liquid vs. Illiquid Supply 22

Balance \geq \$1,000 23

Exchange Balance 24

Ethereum 25

Measurement Breakdown 25

Ether Rebounds 37% in Q2 2025,
Possible Golden Cross Approaching 26

Ethereum continued

Realized Price 27

MVRV Z-Score 28

Ethereum Market Cap Ratio of Bitcoin 29

Net Unrealized Profit/Loss (NUPL) Ratio 30

Percent in Profit 31

Monthly Address Metrics 32

New Address Momentum 33

Layer 2 Transaction Count 34

Staking Numbers and Validators 35

Net Issuance and Burn 36

Contributors 37

Disclosures 38

EXECUTIVE SUMMARY: Q2 2025

Bitcoin

After eclipsing new all-time highs in Q4 2024, bitcoin's price cooled in Q1 2025—but that cooling period was brief as the asset claimed a new all-time high once again in early Q2 2025. Bitcoin was trading at \$108,374 as of June 29, with several on-chain metrics and long-term fundamentals gaining strength.

Although Q1 2025 saw market participants realize profits following the Q4 2024 rally, Q2 2025 witnessed renewed buy-side pressure. Demand for bitcoin was strong, rising 31% in price quarter-over-quarter. However, it should be noted that significant short-term price appreciation may prompt further profit-taking, as evidenced by investor activity between Q4 2024 and Q1 2025.

While growing geopolitical uncertainty remains a notable headwind, the market's perception of bitcoin may be shifting—from a high-volatility, risk-on asset to a potential hedge and store of value. In fact, several companies announced making allocations to bitcoin as part of a corporate treasury strategy in Q2 2025. This trend may have contributed to the asset's price appreciation, and it also potentially signals growing institutional acceptance of bitcoin as a long-term asset.

Continued inflows into spot bitcoin exchange-traded products (ETPs) have remained a strong tailwind, alongside expectations of multiple Fed rate cuts before year-end. With new all-time highs already achieved, many investors now share the same questions: Is there further room for bitcoin to run this cycle? Will the market witness another euphoric blow-off top, or has the asset's momentum started to fade? The Fidelity Digital Assets® Research team explores these questions through on-chain and market data analysis.

What This Report Is and How to Use It

Digital assets are unique in that they not only generate traditional market signals based on price action, but they also generate an entirely new set of signals based on public on-chain data. These signals can be valuable for all types of investors, but the challenge lies in determining which signals to use, how to match the signal to the correct investment time horizon, and how to interpret the data correctly.

In this report, we have collected what we think are the most reliable signal indicators, grouped them by time horizon, and provided an overall assessment of the conditions for each time horizon. We then provide a breakdown of the signals included in each time horizon and their charts.

EXECUTIVE SUMMARY: Q2 2025

Ethereum

Ether posted a strong rebound in Q2 2025, but many short-term metrics have yet to fully reflect this recovery, which is possibly due to the limited time since the price reversal. However, long-term metrics and valuation signals remain well below historical cycle tops, signaling that the rebound may still be in its early stages.

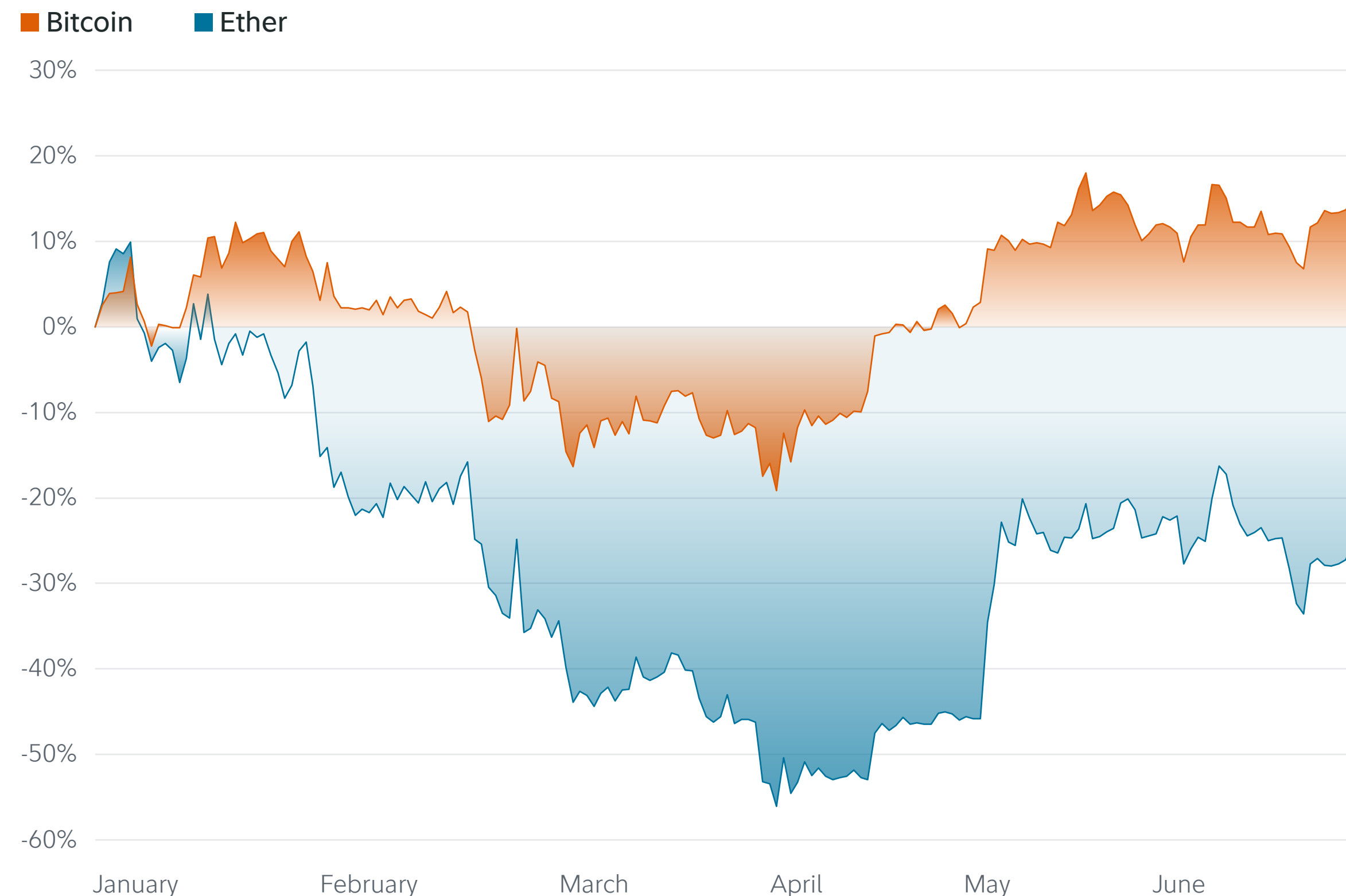
Realized price has barely moved despite the market rally, suggesting that long-term holders are not yet taking profits. Meanwhile, ether's market price has reclaimed its position above realized price, a dynamic historically associated with accumulation phases and early-stage bull markets.

Looking across a longer time horizon, network fundamentals remain resilient. Despite protocol changes aimed at reducing validator count, high demand for staking led to increases in both validator numbers and total staked ether. This indicates that while the network is becoming more efficient, investor appetite for staking remains strong, likely influenced by the continued success of ether-based investment products and speculation around future staking integrations.

Layer 2 activity showed a modest recovery after a Q1 2025 decline, although it fell short of expectations following the Prague/Electra (Pectra) upgrade. The anticipated surge in transactions did not materialize, possibly due to already-low fees and the nuanced dynamics of the blob market. Still, the rollup-centric roadmap remains intact, and Layer 2 platforms are expected to play a growing role in Ethereum's long-term revenue model.

Lastly, ether's supply remained inflationary this quarter, as increased block space continued to outpace demand. While this outcome was expected and reflects Ethereum's deliberate prioritization of scalability and user experience, it also represents a form of negative net income for most token holders. As a result, we are now categorizing this dynamic as a negative signal in our framework, despite its alignment with long-term network goals.

Bitcoin and Ether Returns Compared YTD



Source: Fidelity Digital Assets Research via Coin Metrics, 06/29/25.

Q2 2025 Signals Report

BITCOIN

Measurement Breakdown | Data to Watch

ETHEREUM

Measurement Breakdown | Data to Watch

SHORT-TERM (<1 YEAR)	Commentary	Overall Condition: POSITIVE
Is Price Trading Above the 200-Day Moving Average (SMA)?	Yes, price is 13% higher than the 200-Day	POSITIVE
Golden Cross or Death Cross?	Golden cross formed again on May 22	POSITIVE
Price > Realized Price	Yes, 77% higher than realized price	POSITIVE
MID-TERM (1-5 YEARS)	Commentary	Overall Condition: POSITIVE
NUPL Zone	Increased to "Belief-Denial" zone	POSITIVE
MVRV Z-Score	Stuck between "Undervalued" and "Overvalued"	NEUTRAL
Reserve Risk	Maintaining a healthy ratio	NEUTRAL
Puell Multiple	Miners' returns are heightened due to price increases and lower difficulty	NEUTRAL
Hash Rate	Hash rate continues to rise, setting new all-time highs	POSITIVE
Hodler Net Position Change	Long-term holders are accumulating	POSITIVE
Addresses in Profit	99% of addresses are in profit, up from 87% in Q1 2025	NEGATIVE
Bitcoin Yardstick	Bitcoin is priced appropriately against the network's energy input	POSITIVE
Bitcoin Price Phases	Currently in the Acceleration Phase	POSITIVE
LONG-TERM (>5 YEARS)	Commentary	Overall Condition: NEUTRAL
Price > 200-Week	Yes, price is in a healthy position at 75% above the 200-Week	POSITIVE
Monthly Address Metrics	All three metrics are trending lower	NEUTRAL
New Address Momentum	Daily and 30-day new address counts are decreasing, indicating a slowdown	NEGATIVE
Liquid vs. Illiquid Supply	Illiquid supply declined 2% during Q2 2025, whereas liquid supply increased just over 3%	NEUTRAL
Balance ≥ \$1k	Positive long-term growth trend, up 16.2% in Q2 2025	POSITIVE
Exchange Balances	Exchange balances continue to fall—users removed over 6% of holdings throughout Q2 2025	POSITIVE

Golden Cross: There and Back Again

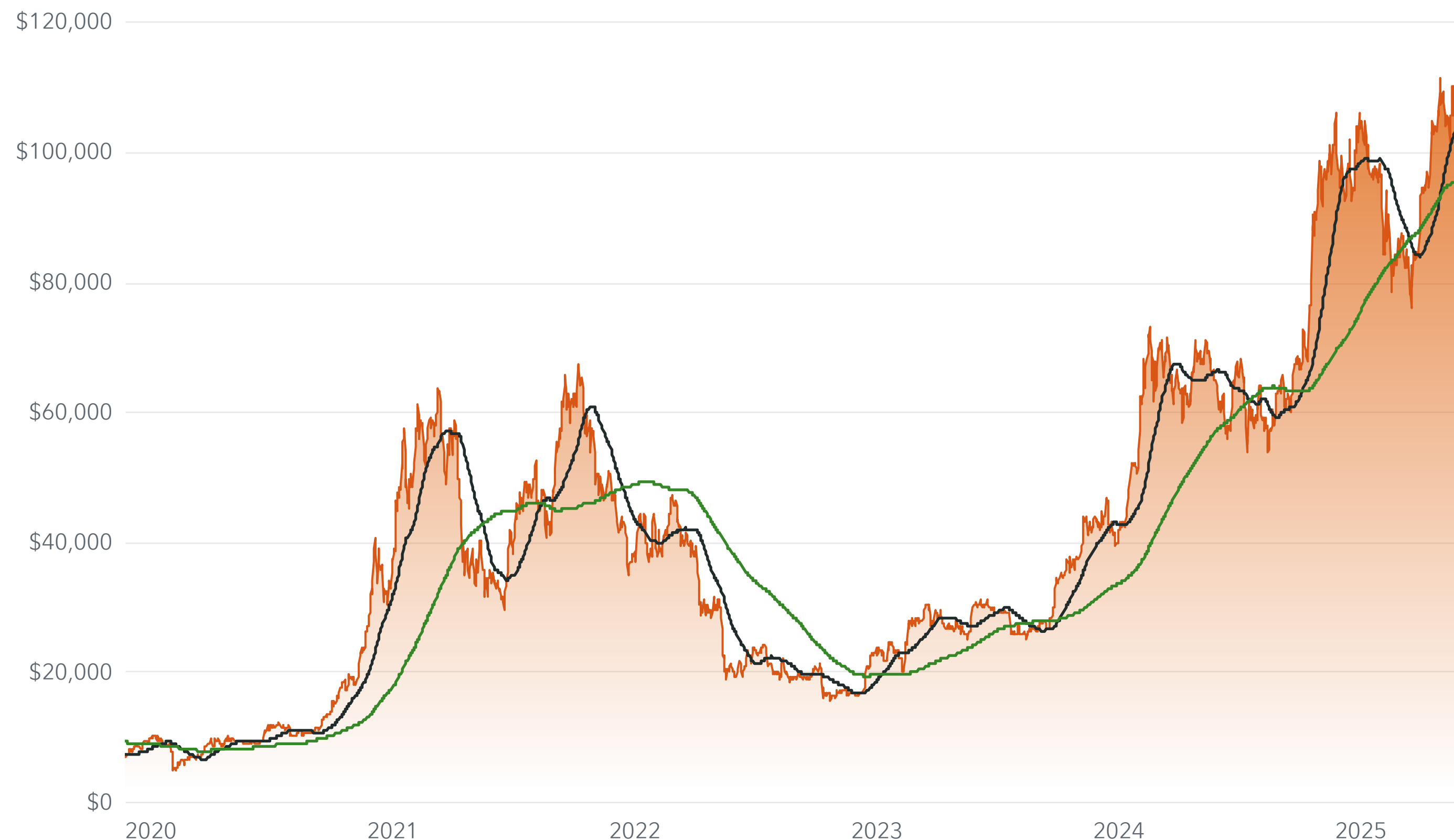
Our analysis suggested that a “bear trap” was being formed in Q1 2025. A bear trap can be understood as a pattern in which a death cross quickly reverses, leading to a significant leg up in price shortly thereafter. This trend was previously seen in late 2015, mid-2020, and late 2023.

As anticipated, short-term indicators switched from a death cross back to a golden cross. Q2 2025’s price action resulted in the shortest death cross period since October 2015, which lasted only 44 days. This quarter, the death cross pattern was formed on April 6, breaking 45 days later on May 19.

Bitcoin ended Q1 2025 at \$82,560, rising 31% in Q2 2025 to close at \$108,375. Notably, it has maintained a closing price above \$100,000 for 53 consecutive days as of June 29—despite growing stagflation concerns, tariffs, geopolitical tensions, and routine profit-taking following the asset’s recent rally. This sustained performance may signal the asset’s maturation and growing stability within an increasingly volatile market.

Bitcoin: Price vs. 50-Day vs. 200-Day

■ Bitcoin Price ■ 50-Day SMA ■ 200-Day SMA



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Realized Price

The realized price is a metric that aims to capture the average cost basis of all current token holders. By capturing a token's last trade price, tokens that are presumed to be lost can be discounted. Bitcoin's realized price was approximately \$48,000 at the close of Q2 2025, maintaining a consistent uptrend since the beginning of 2024.

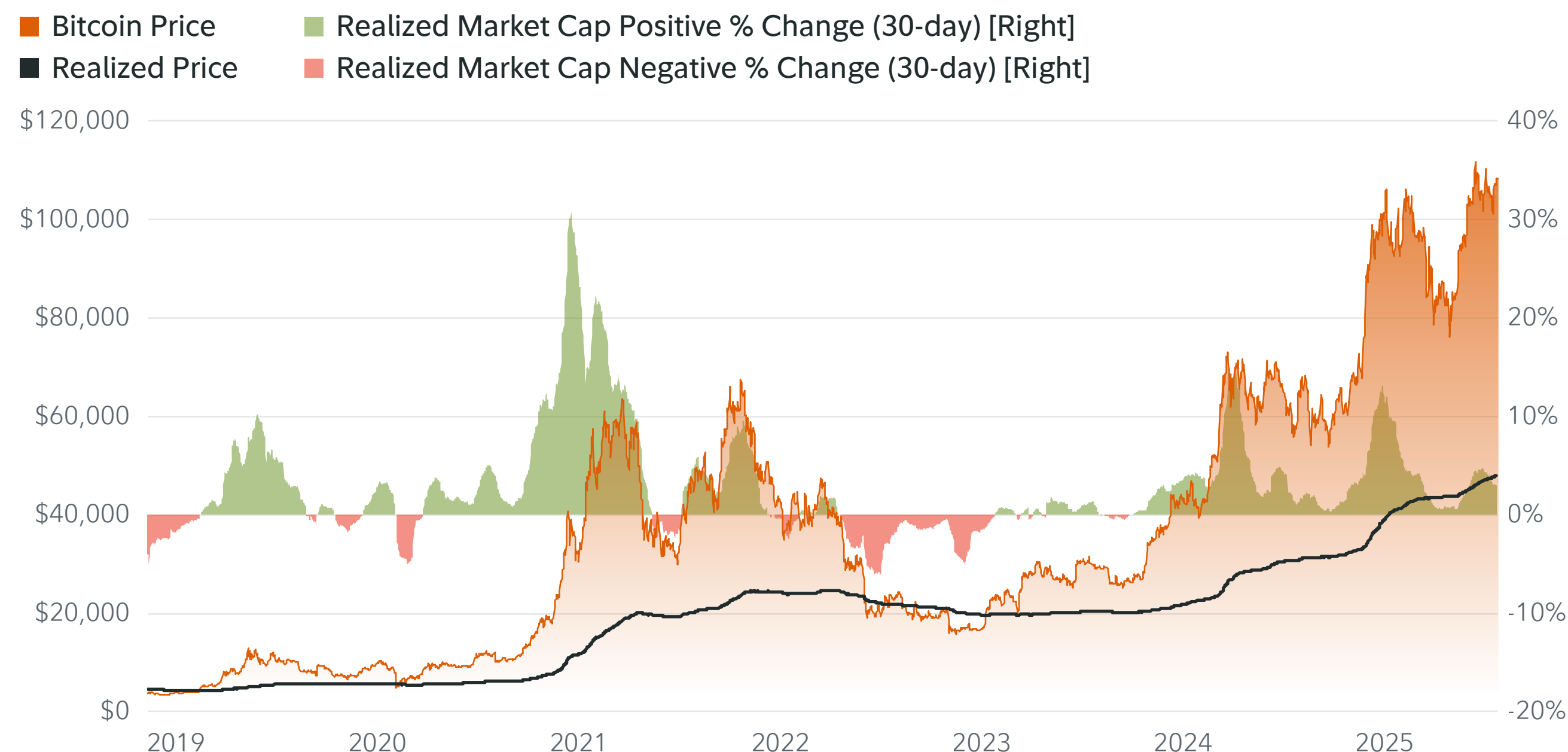
As of June 29, 2025, bitcoin's price sat 77.1% above its realized price. This metric stood at 61.5% in Q1 2025, indicating that price was 61.5% higher than realized price last quarter. The increase reflects bitcoin's notable price appreciation throughout Q2 2025. Continued abatement of selling pressure permeated the market throughout Q2 2025, potentially indicating that those who were seeking to take profits had been exhausted in Q1 2025. While profit-taking may cause quick price pullbacks—often seen after substantial short-term price appreciation—these retracements are normal, healthy, and historically brief. If demand continues to outweigh selling pressure as it has over Q2 2025, the market may trend toward more accumulation or potential price increases throughout the rest of 2025.

The Realized Market Cap can also offer investors another view of Realized Price, as it demonstrates the exact price levels bitcoin is being moved at relative to when it was last moved. If bitcoin was moved (bought or sold) at a low price and then moved again at a higher price, the realized cap would increase as the cost basis rises. Conversely, if bitcoin moved at a high price and moved again at a lower price, the realized cap would fall.

Using this metric, our analysis suggests that many investors took profits. However, these investors may be cooling off as seen by the 30-day change in market cap slowly falling back toward 0% change. The peak of this quarter occurred on June 3, where the historical change reached nearly 5%.

Parallels can be drawn between current price action and Q2 2024. At the time, bitcoin was coming off the back of significant price increases in the prior two quarters before profit-taking tapered off, leading to a prolonged accumulation phase.

Bitcoin: Price vs. Realized Market Cap % Change



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Similarly, 2025 saw a sharp increase in price between April and May, followed by digestion and accumulation throughout the remainder of the quarter. As investors grow fatigued with sideways price action, liquidity eventually dries up, and new participants on either side can move the price. Given that similar accumulation patterns have preceded breakouts in previous market cycles, should investors expect more volatility on the horizon?

Although the answer is not yet clear, the most notable short-term support levels to watch in the meantime are \$104,194 (average short-term realized price [bitcoin held for less than three months]), \$105,955 (50-Day SMA), \$96,242 (200-Day SMA), and \$48,056 (realized price).

Net Unrealized Profit/Loss (NUPL) Ratio

Historically, this metric does a good job of assessing overall market sentiment.

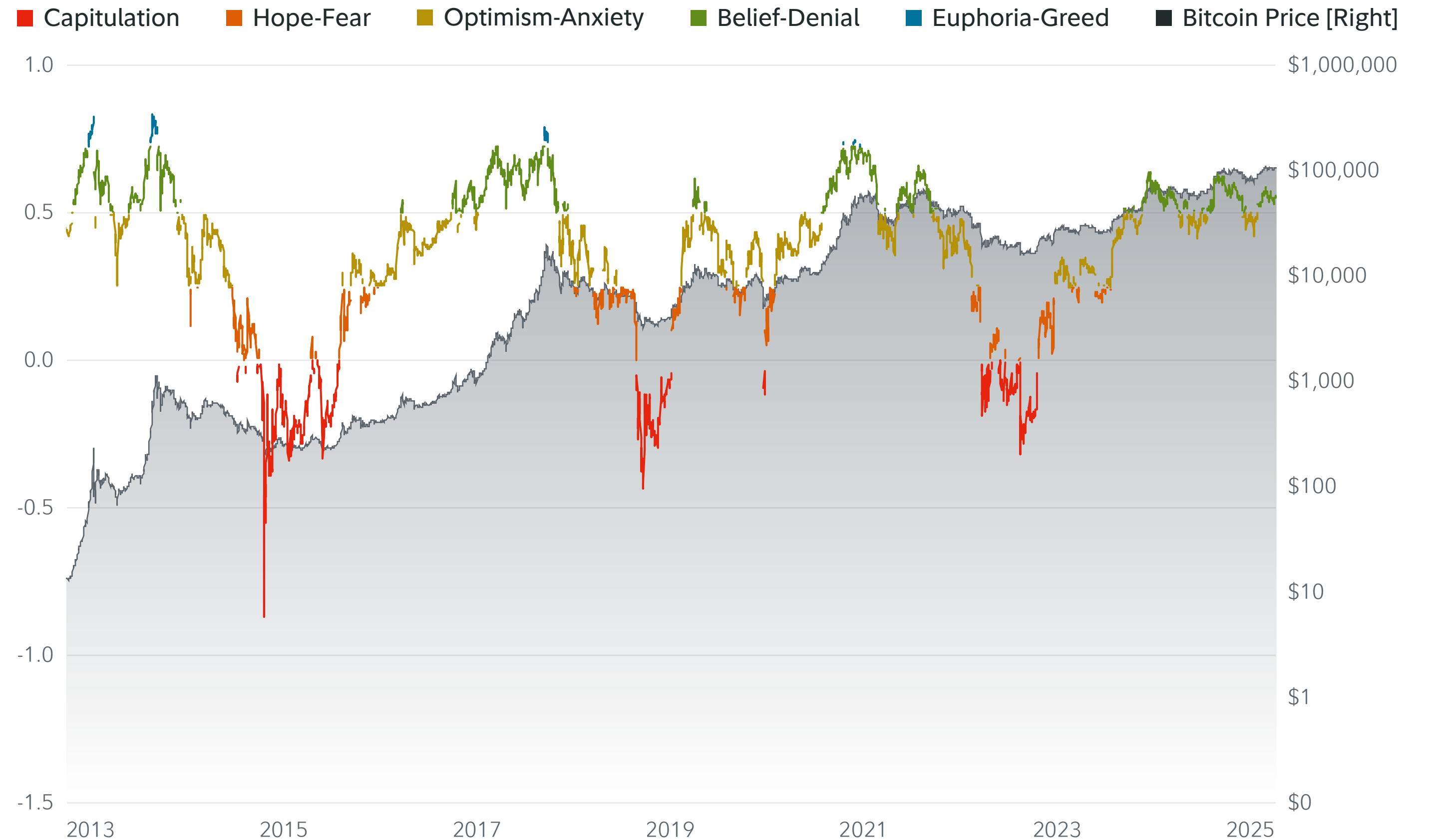
Bitcoin's NUPL score offers insight into the relative level of unrealized profits, or losses, visible on-chain at any given time. A NUPL score below zero, last witnessed in Q1 2023, implies net unrealized losses and has historically signaled periods of capitulation. A NUPL score over 0.50 indicates large unrealized profits held on-chain, which may suggest some profit-taking could be likely.

The NUPL score rose from the "Optimism-Anxiety" zone seen in Q1 2025 to the "Belief-Denial" zone in Q2 2025. A score of 0.56 indicates that the market is in a strong net profit position where unrealized profits outweigh unrealized losses. This indicator has oscillated between these zones over the last several quarters as investors realize profits. While Q4 2024 to Q1 2025 was characterized by profit-taking leading to a step down toward "Anxiety," Q2 2025 saw an uptick in demand and buy-side pressure, moving price above \$100,000, and flipping back into the "Belief" zone.

Historically, it has not been uncommon to see this back and forth between "Optimism-Anxiety" and "Belief-Denial" for short periods, especially when accompanied by volatility in bitcoin's price. This metric is fluid and relative. Therefore, it will remain important for investors to be aware of current sentiment when trading for short-term profits.

Read more [here](#) (external link).

Bitcoin: Net Unrealized Profit/Loss (NUPL)



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

MVRV Z-Score

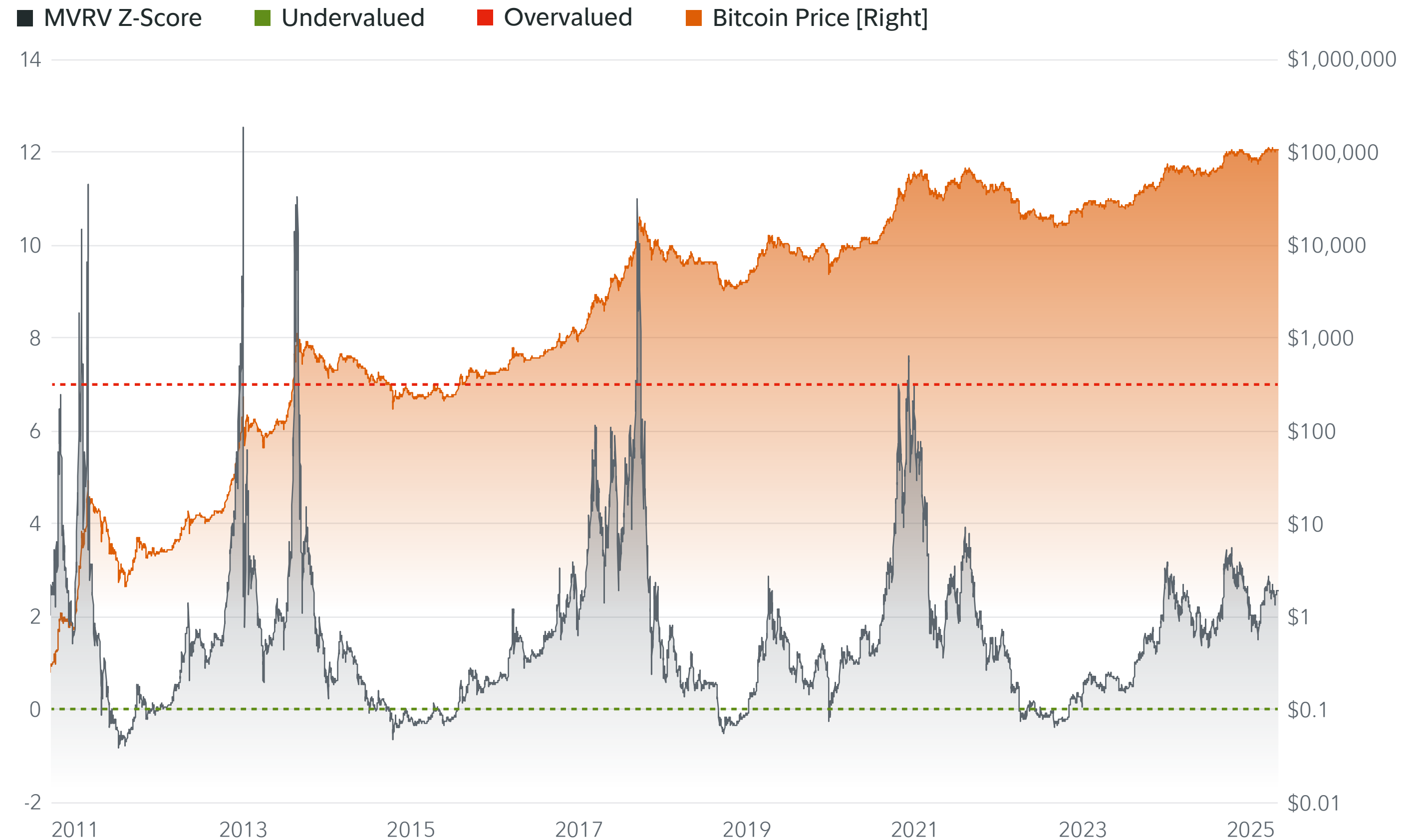
The **MVRV Z-Score** is used to assess when bitcoin's price is over/undervalued relative to its "fair value." When the market value is significantly higher than the realized value (acquisition price), it has historically indicated a market top (red zone), while the opposite has indicated a market bottom (green zone).

Q2 2025 saw substantial demand evidenced by an increase in bitcoin buying. As a result, bitcoin's price grew from \$82,560 to \$108,375, representing a quarter-over-quarter increase of 31%. This demand caused the MVRV Z-Score to bottom quickly in early April. It has since grown to 2.5.

Interestingly, there is a divergence between price and MVRV here. While price has continued to rise roughly 14% year-to-date, the MVRV Z-score fell 7%. The difference is likely due to profit takers above \$100,000, as demonstrated in the chart "Bitcoin: Net Unrealized Profit/Loss (NUPL)." Most notably, this metric is not indicating any type of historical top signal or euphoric selling as it has in previous bull markets.

The MVRV-Z score remains comfortably stuck between the "Undervalued" and "Overvalued" zones, as indicated by the on-chain data. We currently see this indicator as "neutral." If price continues to trade sideways, it is possible to imagine an increase in volatility as investors become impatient and raise the stakes with leverage or other investment strategies.

Bitcoin: MVRV Z-Score



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Reserve Risk

Reserve risk is used to assess the confidence of long-term holders relative to the native coin's (bitcoin) price at a given point. When confidence is high and the price is low, there is an attractive risk/reward to invest (the Reserve Risk is low). When confidence is low and the price is high, the risk/reward is unattractive (the Reserve Risk is high).

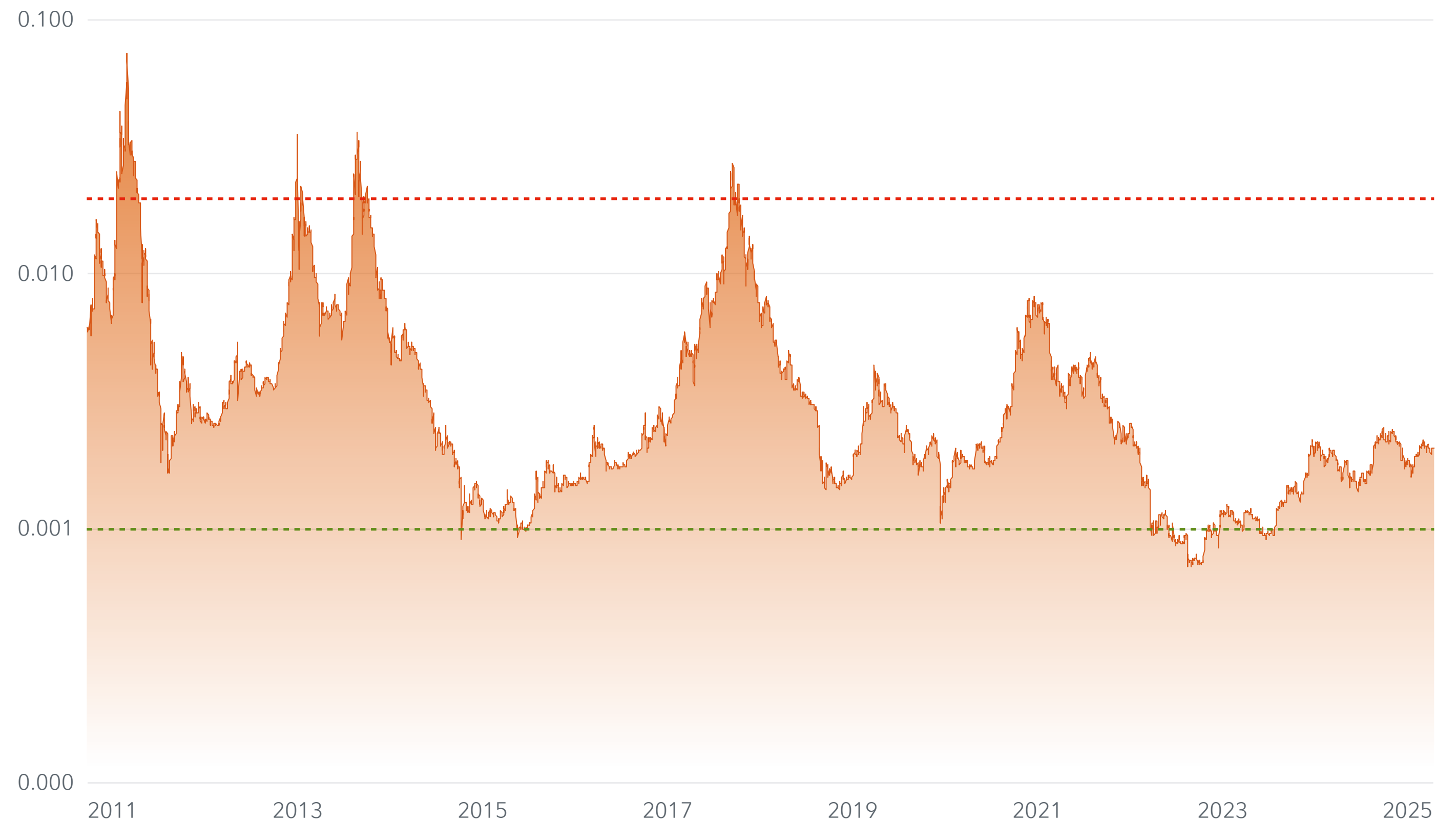
Reserve risk continues to mirror the MVRV Z-Score with support from a local bottom. We continue to believe that bitcoin remains in the lower-risk category as there are significant tailwinds that could positively impact its price.

The expansion of the money supply (M2), continued long-term investor inflows to spot bitcoin ETPs, and an increasing number of institutions allocating to bitcoin as a corporate treasury asset all create favorable conditions for an asset with absolute scarcity (finite supply).

There are several potential positive catalysts for bitcoin's price as the second half of 2025 approaches. These include continued inflows into the ETPs, CPI data prints trending lower since Q1 2025, and increasing expectations of further Fed rate cuts.

Bitcoin: Reserve Risk

■ Reserve Risk ■ Low Risk ■ High Risk



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Puell Multiple

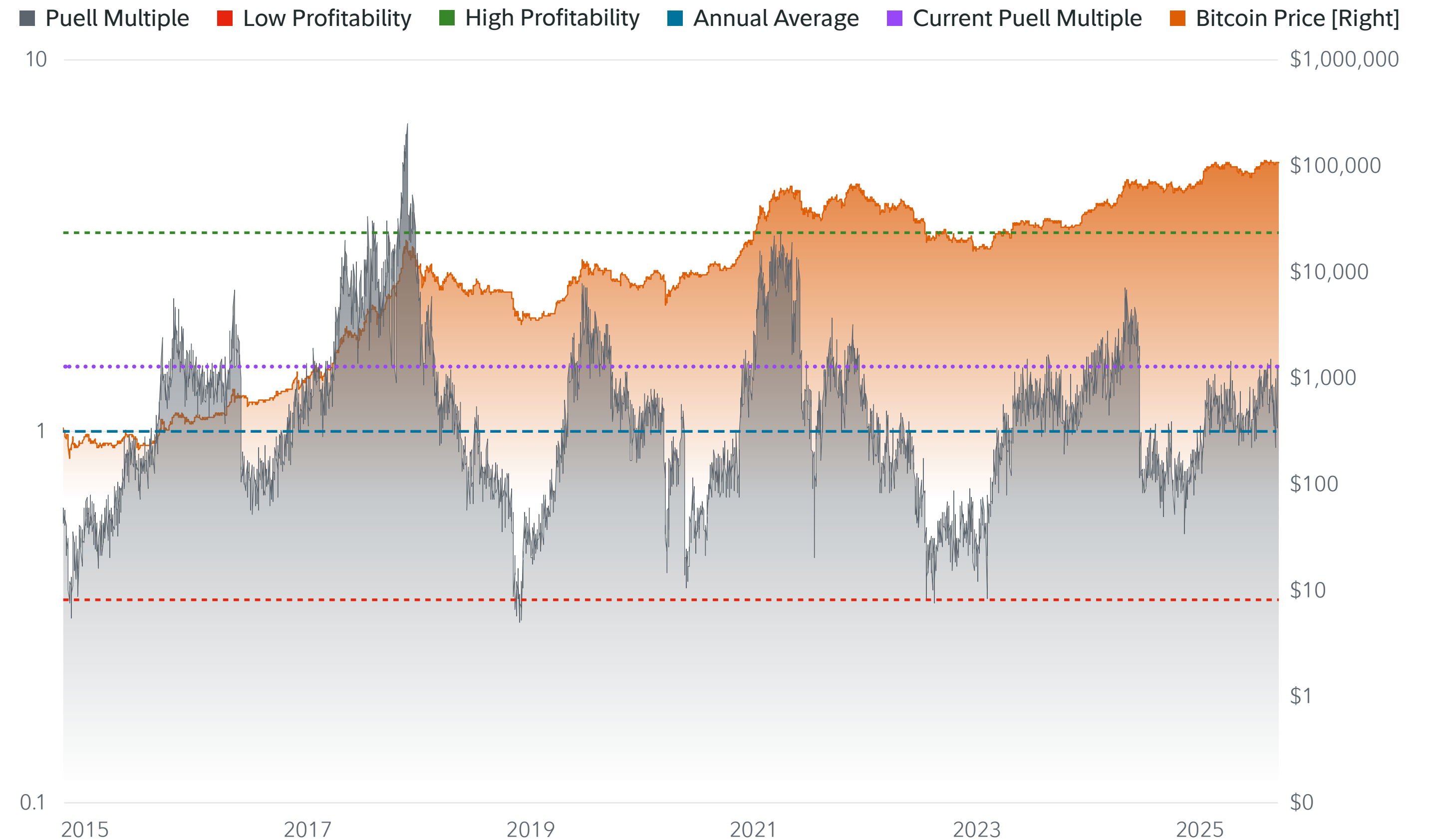
Created by David Puell, the Puell Multiple shows when miner profitability is low compared with the previous year. When the Puell Multiple is high, it means that mining revenue is higher than last year's average. Historically, when this metric is in the high red zone, it has generally corresponded to cycle tops.

Our Q1 2025 Signals Report speculated that miners would likely see higher-than-average profitability as the Puell Multiple began accounting for the new block reward. With the halving occurring more than a year ago, did that expectation prove true?

Until April 24, 2025, this metric gravitated toward the neutral level of one. Now, factoring in only the new block reward, the Puell Multiple has climbed as high as 1.49, indicating that miners are earning nearly 50% more than the average of the past year. This aligns with bitcoin's price rising from the \$90,000 range to above \$100,000. However, the hash rate—and therefore, the competition for block rewards—has not increased in the same manner.

Zooming in on this quarter, bitcoin's USD price rose 31%, hash price rose 25.6%, and consequently, the difficulty has risen 2.8%.

Bitcoin: Puell Multiple vs. Price (USD)



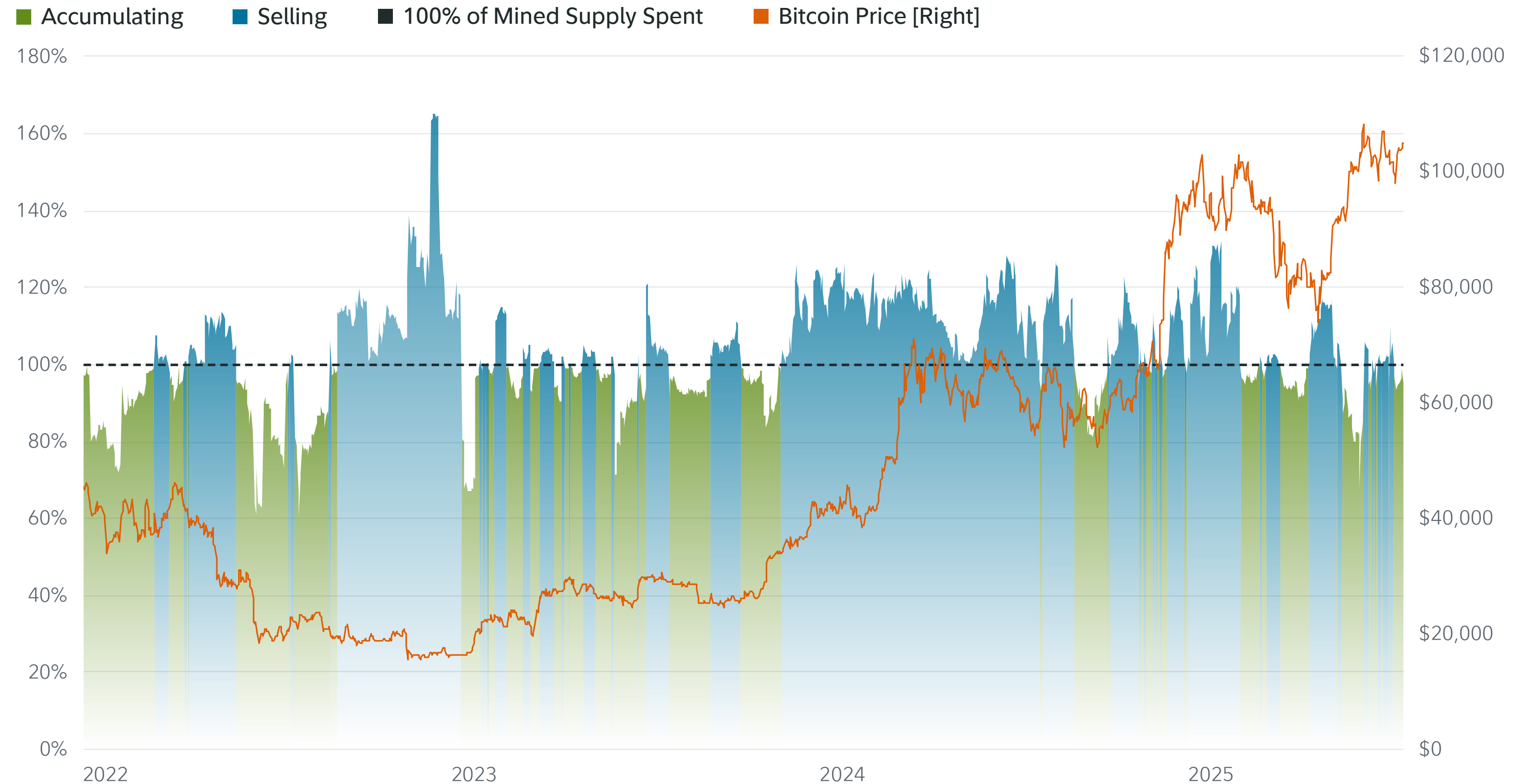
Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Percentage of Bitcoin Sold vs. Accumulated by Miners

Miner balances appear comfortable this quarter, which aligns with the data presented by the Puell Multiple. While selling occurred in Q1 2025, selling in Q2 has largely normalized as evidenced by increased accumulation despite price fluctuating within the \$105,000–107,000 range.

Despite this, the miner balance only increased by 0.11% quarter over quarter. This shows the marginal profits seen by this cohort and demonstrates how efficiently Bitcoin manages network participants.

Bitcoin: Percent of Bitcoin Sold vs. Accumulated by Miners



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Hash Rate

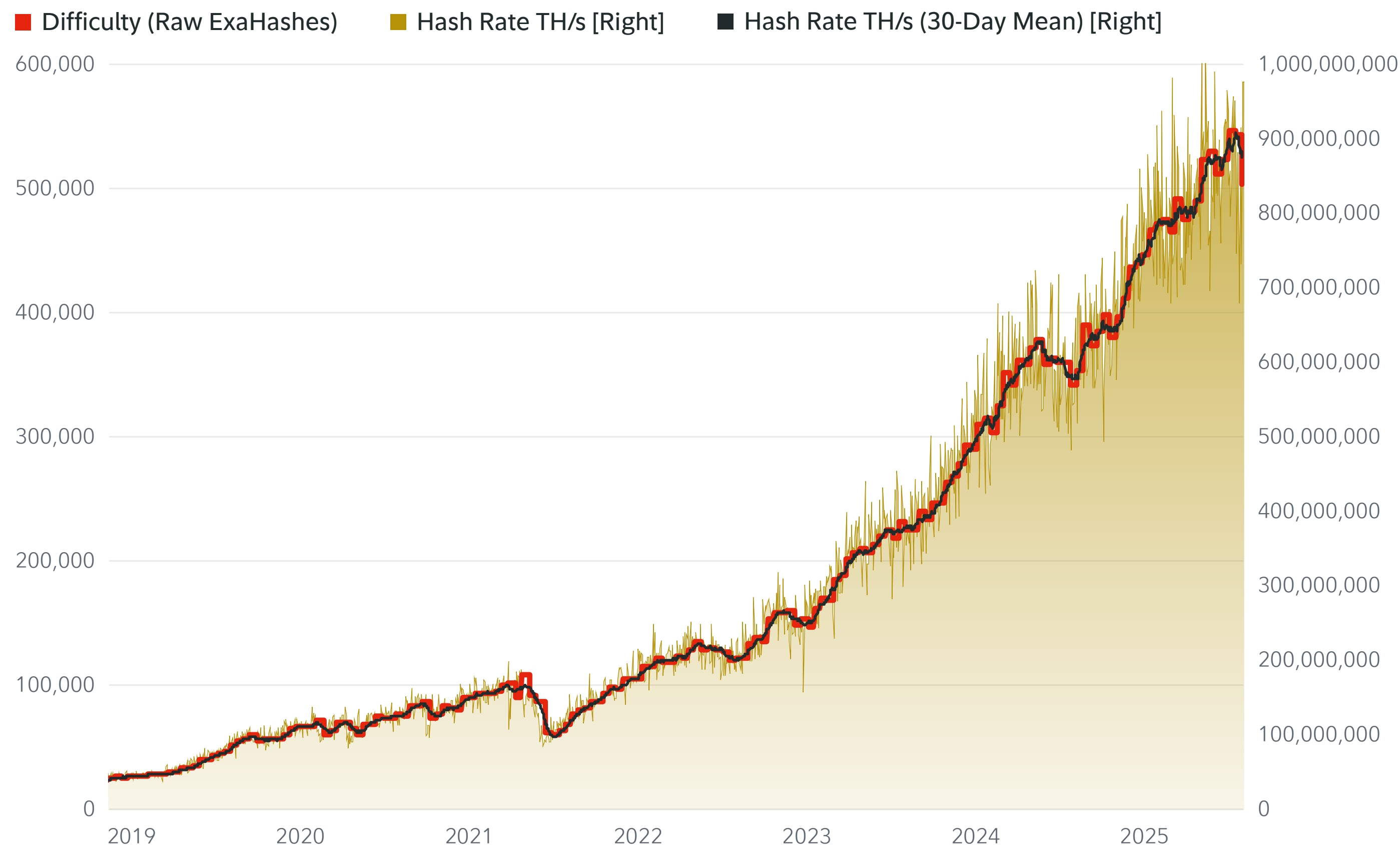
Bitcoin's hash rate metric is a rough estimation of the number of hashes per second that are trying to find a new block. In other words, it allows us to measure the computational power of the Bitcoin network. While this metric is normally considered a lagging indicator to price, it provides additional insight into miner sentiment and network profitability. A basic view into this metric indicates that if the hash rate is falling, the cost of mining is higher than what the network pays in its block subsidy (3.125 bitcoin). When the hash rate is rising, it can be assumed that profit margins have increased for miners due to price appreciation or an increase in mining efficiency.

There was a drastic drop in the daily hash rate of nearly 25% toward the end of June, with some speculating that the decline was related to local U.S. miners shutting off their flexible energy machines.¹ This could have led to a larger-than-normal correction in the difficulty, resulting in a drop of 7.5%. To put this into perspective, the largest difficulty drop since China's 2021 mining ban occurred in December 2022, when bitcoin's price was bottoming out around \$17,000.

This example demonstrates how the Bitcoin network coordinates external participants. As miners go offline, the network makes it easier for the remaining participants to find new blocks, continually striving for a block time of ten minutes. In our opinion, because this adjustment was largely due to external factors, we expect to see a full recovery of hash rate—and possibly even an over correction as new participants are incentivized to enter the market.

Quarter-over-quarter changes include a 3% increase in network difficulty, a 31% rise in bitcoin's price (USD), a 26% increase in hash price, and a 7% gain in the 30-day mean hash rate.

Bitcoin: Difficulty vs. Hash Rate



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

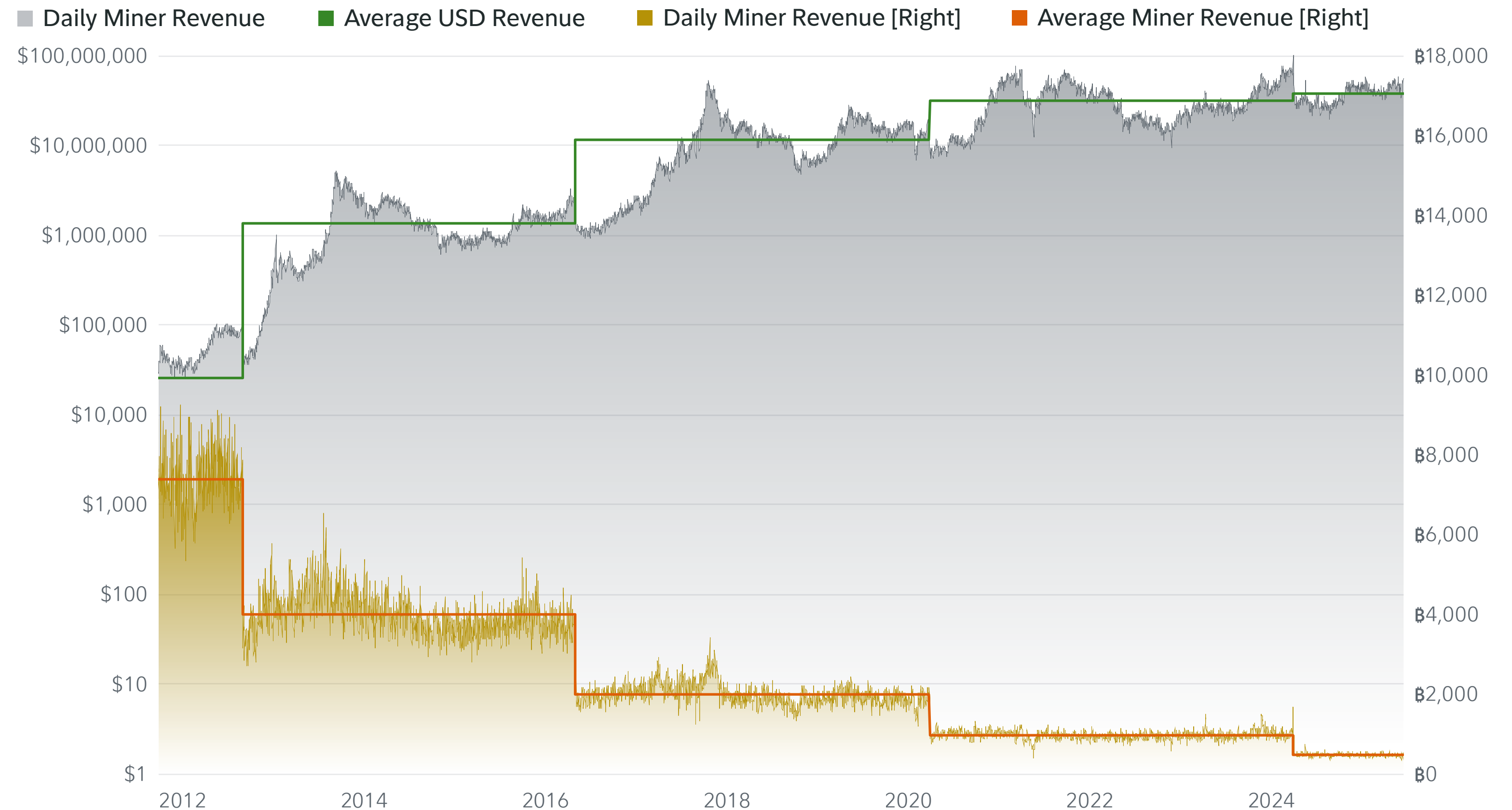
Miner Revenue Denominated in BTC vs. USD

In addition to these mining metrics, we can also view the average total miner revenue in bitcoin versus USD compared to the historical averages by epoch (approximately four years).

As of June 29, 2025, the data shows miners earning 50% more (daily) than the current average since the 2024 halving (April 19, 2024–June 29, 2025) and 20.2% more since the previous epoch (2020–2024). This is notable as hash rate and difficulty have continued to climb, pushing out the least efficient miners. This is significantly higher than previous epochs, reflecting bitcoin’s long-term price appreciation. In other words, while the block subsidy—denominated in bitcoin—continues to fall, the USD value of miner rewards has increasingly grown. Miners today receive roughly 76% fewer bitcoin as a reward than in the 2016–2020 epoch. However, they are earning almost 400% more in dollar-denominated rewards.

Therefore, it appears miners may be positioned to continue growing and increasing their hash rate—so long as the demand for bitcoin sustains or grows.

Bitcoin: Miner Revenue in BTC vs. USD Over Time



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

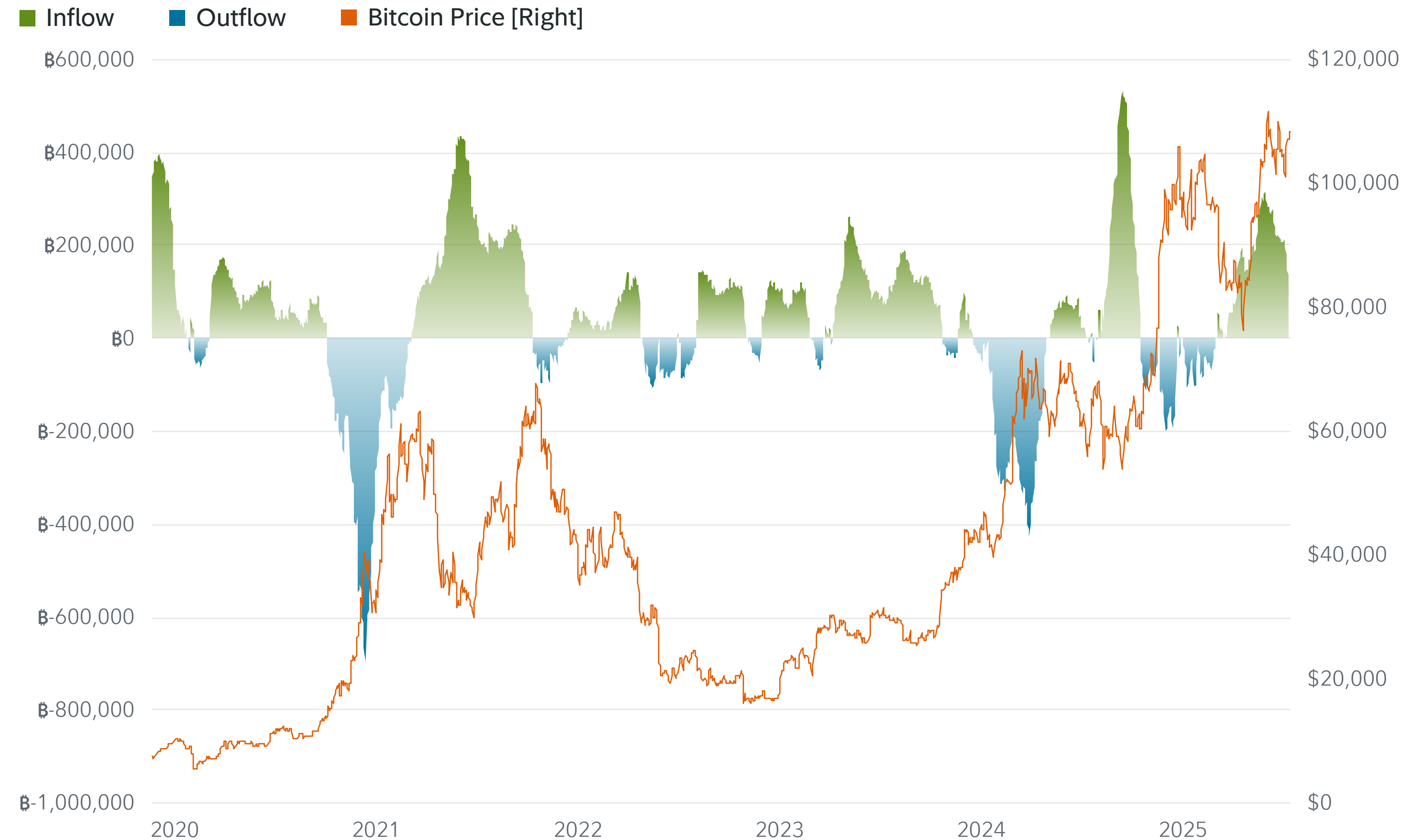
Long-Term Holder Net Position Change

Long-Term Holder Net Position Change shows the monthly position change of long-term investors. It indicates when long-term investors sell (negative) and when they accumulate (positive) net-new positions. This metric uses time to quantify the addresses or Unspent Transaction Output (UTXOs) that should be represented. In other words, instead of using identities of known holders, this metric more accurately represents bitcoin as it “matures.” The age of maturation is set at 155 days by Glassnode.

Flows were largely net negative in Q1 2025, with roughly 13,000 bitcoin leaving this cohort. However, Q2 introduced a significant change. The average monthly bitcoin maturing into the long-term holder’s cohort is 216,000 bitcoin. In aggregate, the long-term holder cohort acquired roughly 590,000 more bitcoin since March 30.

Note: This metric tracks 30-day net flows, meaning it moves somewhat slower than tracking the supply held by this cohort. However, it still provides a meaningful indication of the trend. After rising to its peak in May, the data shows less accumulation as the price of bitcoin largely traded sideways. If the trend continues, we may see more profit-taking and outflows from this supply which could cause prices to fall—unless released supply is met with new buyers.

Bitcoin: Long-Term Holder Net Position Change



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

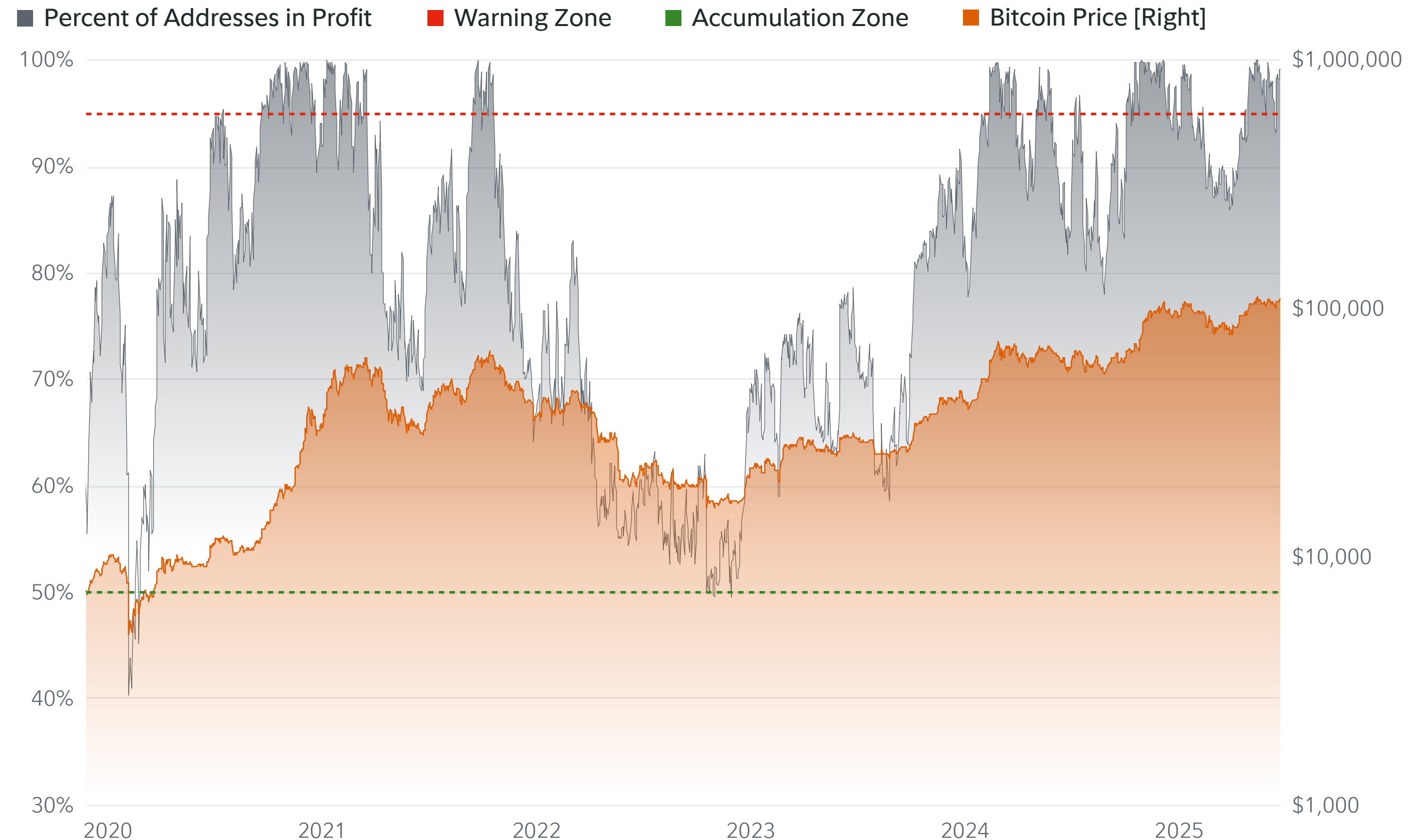
Percent of Addresses in Profit

The percentage of addresses in profit indicates unique addresses with funds that have an average buy price that is lower than the current price. "Buy price" is defined as the price at the time coins were transferred to an address.

The percentage of addresses in profit has increased from 87% at the beginning of Q2 2025 (\$82,560) to 99% at the end of the quarter (\$108,375). Given that new all-time highs in price were achieved in Q2 2025 and prices are just below that milestone at the time of writing, this high percentage of addresses in profit is to be expected. It is important to note that a high percentage of addresses in profit can lead to profit-taking and volatility thereafter. However, bull markets will spend larger amounts of time with these higher percentages due to the trajectory of price. As bitcoin enters a price discovery period, new all-time highs will be set, and all market participants will be in profit.

While a new all-time high was reached in Q2 2025, the market has largely been in a period of consolidation since the beginning of June. Will this cooling off lead to a longer period of consolidation, similar to Q4 2024? Or is this lull in activity just priming the market for another substantial leg up this cycle? Although the exact trajectory is unclear at this time, we will be monitoring the trend closely.

Bitcoin: Percentage of Addresses in Profit



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Bitcoin Yardstick

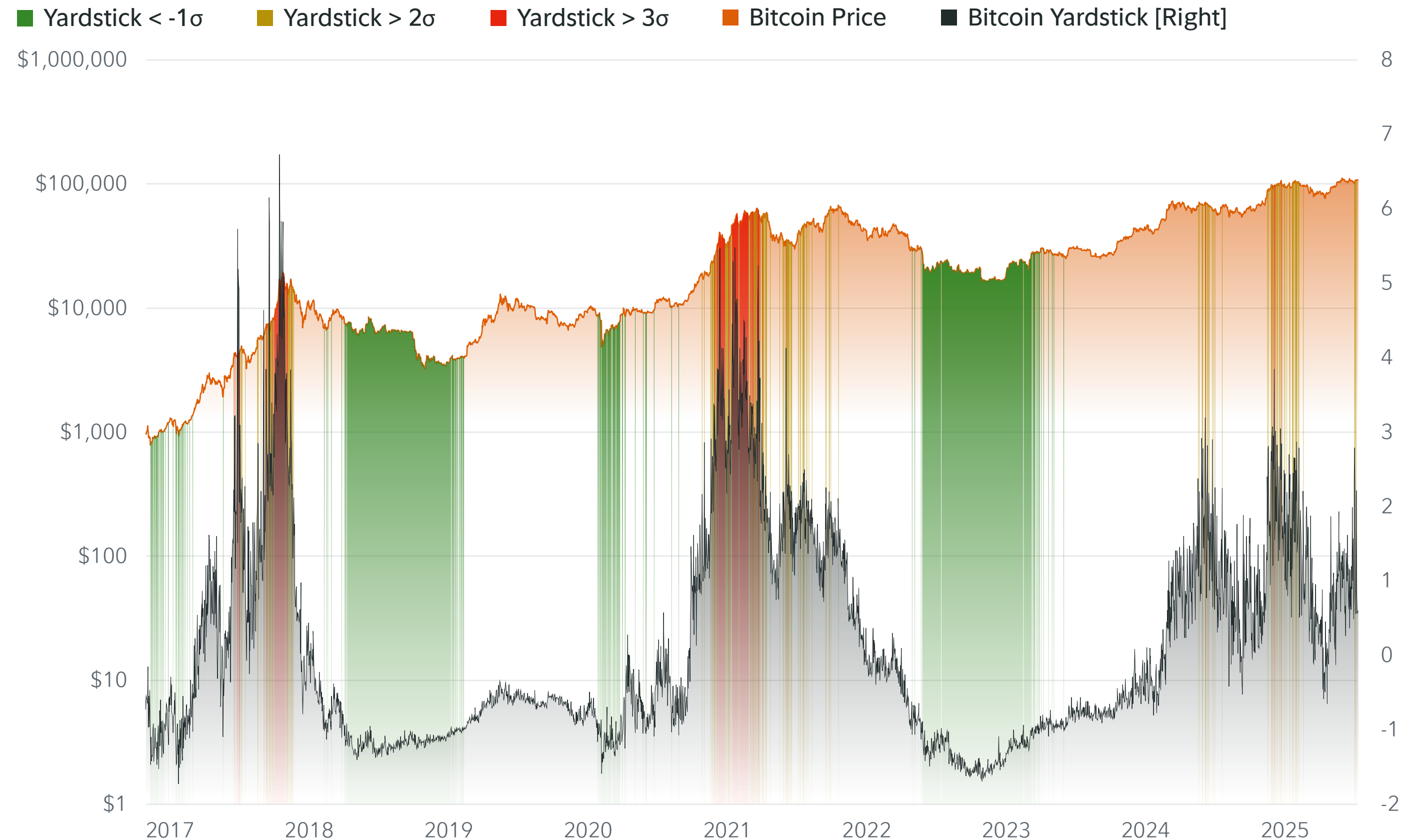
The Bitcoin Yardstick, or Hashrate Yardstick, is a similar concept to the Price-to-Earnings (PE) Ratio. However, instead of stock price divided by company earnings, it calculates bitcoin's total market cap divided by its hash rate (a measure of energy being expended to secure the network). The idea is that the lower the ratio, the "cheaper" bitcoin looks from an investor standpoint, just as a lower PE ratio can be interpreted as a "cheap" or undervalued stock.

The yardstick currently indicates that bitcoin maintained a position between negative one and three deviations of the mean throughout Q2 2025. Throughout the six months prior to this quarter, it appeared as though price was moving toward "overheated," with nearly 20% of days falling in the "warning" zone (between two and three standard deviations). However, bitcoin's price has remained stable despite rising geopolitical tensions.

It is important to note that there were four days in late June where price maintained \$100,000, but the network output (hash rate) began to fall. At first glance, this could be surmised as an early indication that bitcoin was entering an overpriced level. However, these dates fall in the last week of June, which corresponded with an extreme heat wave hitting the U.S. It is possible that U.S.-based miners were going offline during that week to return power to local energy grids, which is supported by hash rate data and public statements from miners.

Read more about the hash rate [here](#).

Bitcoin: Yardstick



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Bitcoin Price Phases

“Bitcoin Price Phases” helps to gauge the current bitcoin market environment. This metric considers bitcoin’s price through the lens of address profitability combined with volatility and can provide further detail that may not be found looking solely at price or the percent of addresses in profit metric.

In Q2 2025, bitcoin continued to trade in the Acceleration Phase of the price phase cycle, which is defined by high volatility and high profit. Out of a possible 91 days in Q2 2025, the market experienced 54 days of high volatility and high profit. Bitcoin also saw a new all-time closing high of \$111,695 on May 22, per Glassnode. This further strengthens our thesis that the market will remain in the Acceleration Phase for the foreseeable future.

Our Q1 2025 Signals Report explored the possibility of bitcoin seeing a blow-off top during this phase, which has been the historical norm. However, that has yet to materialize. We will continue to look for the possibility of a breakout in the coming months, but as bitcoin matures, the market may begin to experience more drawn-out phases with lower overall volatility.

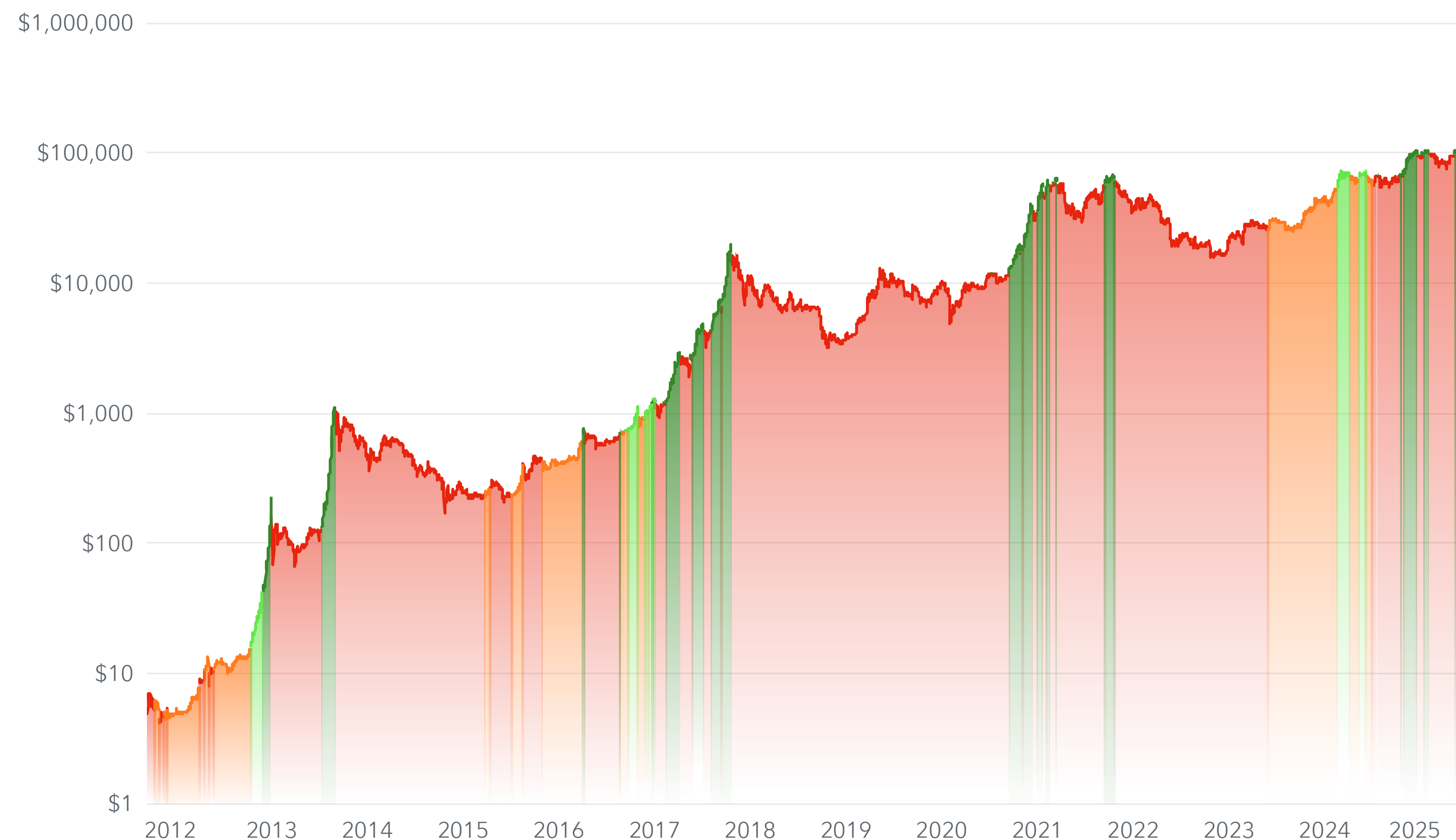
This bitcoin cycle saw its first high profit, high volatility day on July 20, 2024, and its current Acceleration Phase remained underway at Q2 2025’s close. Therefore, we are now nearly one year into this phase. As of June 30, 2025, bitcoin is up 65% since the start of the Acceleration Phase, with over 99% of bitcoin addresses in profit.

Historically, this phase has given way to the Reversal Phase, and we do not anticipate a different outcome this cycle. Eventually all bull markets come to an end, but there was no indication of this impending reversal at the end of Q2 2025. The potential for a late cycle blow-off top still exists.

Read more about this metric [here](#).

Bitcoin: Price Phases

■ Price Reversal Phase ■ Price Bottoming Phase ■ Price Appreciation Phase ■ Price Acceleration Phase



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

200-Week Moving Average

The 200-Week SMA is a long-term indicator and, until the 2021 bear market, bitcoin's price had rarely traded below it. Near the end of Q3 2023, bitcoin eclipsed this metric, turning it into support. Since then, bitcoin's price has maintained a healthy gap from the 200-Week SMA. Bitcoin's price at the end of Q2 2025 sat firmly above the 200-Week SMA of \$49,195, marking a 75% difference.

Bitcoin: Price vs. the 200-Week SMA

■ Trading Under 200-Week ■ Bitcoin Price



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Monthly Address Metrics

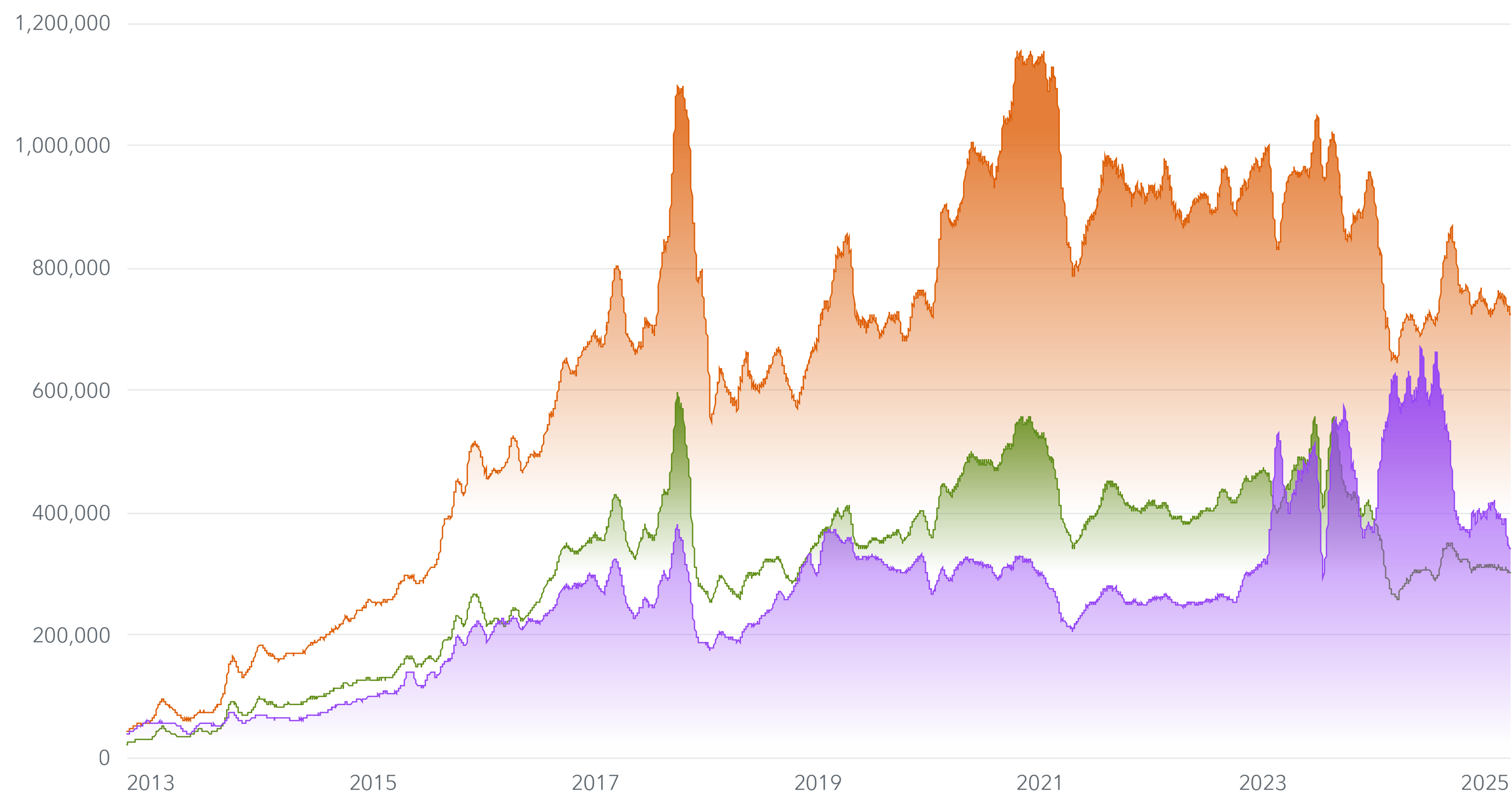
In Q2 2025, new and active addresses—along with transaction counts—continued their decline from the previous quarter. Typically, price increases are accompanied by rising network activity. However, these metrics have not followed suit so far. This may reflect anticipation of further potential price appreciation. Alternatively, it could point toward a growing share of long-term holders—as discussed in the “Hodler Net Position Change” section—or increased institutional participation, where fewer addresses are used to manage larger holdings.

It should be noted that while these metrics are all trending down, this is not necessarily a sign of declining adoption or sentiment. The rise of spot bitcoin ETPs and the use of other publicly traded companies as proxies for bitcoin exposure may be contributing to a decline in active addresses, new addresses, and overall transaction count. As more bitcoin is held off-chain or is moved more efficiently on-chain—using fewer transactions and addresses to meet the broader market’s liquidity demands—traditional network activity metrics may no longer reflect rising demand. We should also note the increased adoption of Layer 2 protocols, such as Lightning and Lightning-adjacent networks, which enable the use of bitcoin without on-chain transactions.

“Bitcoin: Monthly Metrics” charts the monthly metrics for active addresses (-2.9%), new addresses (-3.6%), and transaction count (-12.8%).

Bitcoin: Monthly Metrics

Active Addresses New Addresses Transaction Count



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

New Address Momentum

Taking a closer look at new addresses, we can also measure relative momentum. In this chart, the short-term momentum (30-Day SMA) is compared to the longer-term average (365-Day SMA). When the monthly average is greater than the yearly, it usually indicates higher on-chain activity and a positive short-term trend in network usage. When the opposite occurs, it usually indicates a decline.

The 30-day average (green) of new addresses continued its decline from Q1 2025 into Q2 2025, finishing the quarter down 3.6%. The 365-Day SMA increased by 0.6% over the same time span, yet the daily new addresses decreased over the quarter by 15%. While this has historically indicated a decline in on-chain activity, as mentioned previously in the “Monthly Address Metrics” section, we speculate that new addresses may be indicative of larger institutional adoption making larger transactions rather than purely peer-to-peer activity.

Bitcoin: New Address Momentum

■ Daily New Addresses ■ 30-Day SMA ■ 365-Day SMA



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Liquid vs. Illiquid Supply

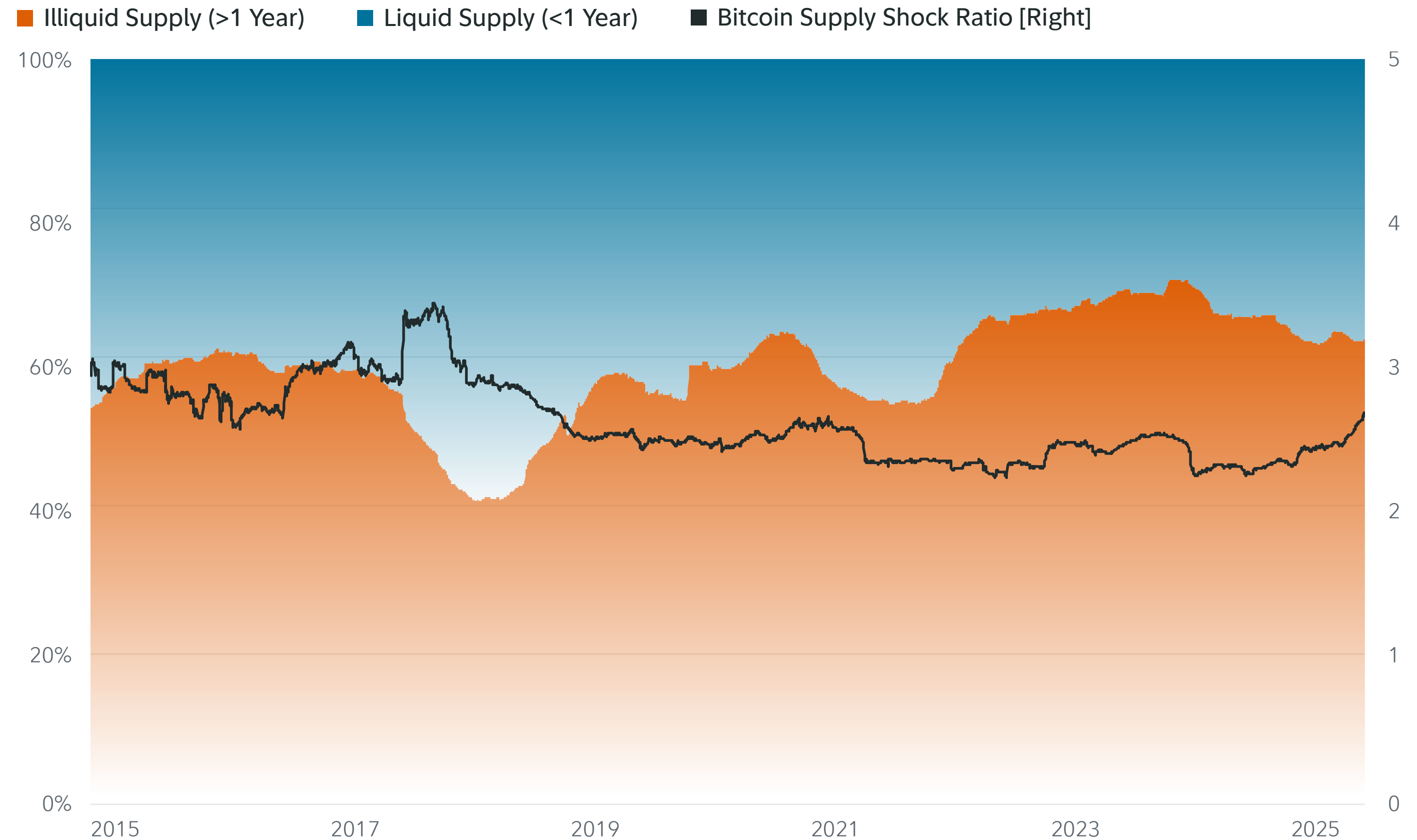
Bitcoin's liquid supply increased slightly in Q2 2025, potentially in part due to increasing demand for bitcoin throughout the quarter. This may have led to some previously dormant coins moving onto exchanges or being sold to realize profits during the significant price appreciation early in the quarter. Illiquid supply sat at 62.3% as of June 29, while liquid supply sat at 37.7%. The last illiquid supply all-time high occurred on November 29, 2023, at roughly 70.54%.

Another way of looking at this is through the "Illiquid Supply Shock Ratio," which attempts to model the probability of a supply shock. When the supply shock ratio trends higher, it indicates that the current sold supply is primarily flowing from the liquid token supply. However, when the opposite occurs, the illiquid supply falls as long-term holders exit the market, usually in profit.

As of June 29, 2025, the illiquid supply shock ratio sat 23% below its 2017 high of 3.37. At the time, bitcoin's price had largely been consolidating under \$1,000. Illiquid supply was maintaining approximately 60% but began selling off into the rise to \$20,000, as seen in the chart "Bitcoin: Liquid vs. Illiquid Supply." The illiquid supply amount has been seeing higher lows with each cycle, potentially indicating that even in the face of rising prices, investors are continuing to hold their coins instead of selling them back into the market. This behavior may lead to supply shocks in the future if demand rises quickly.

Much like the exchange balance metric, this metric can quickly change, as seen in Q2 2025 when the liquid supply increased by more than 3%. Even as the supply shock ratio rises, illiquid supply can and will come out of cold storage to capture a profit. The prevailing trend that we have seen over time is that whenever price rises sharply, illiquid supply typically moves in the opposite direction as holders seek to take profits, thus introducing new coins back into the market.

Bitcoin: Liquid vs. Illiquid Supply



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Balance \geq \$1,000

This metric shows how many addresses hold greater than or equal to \$1,000 worth of bitcoin. Here, we see these “small” addresses continuing the trend of accumulation. Between Q1 2025 and Q2 2025, the number of addresses greater than or equal to \$1,000 of bitcoin increased by a notable 16.2%. This metric even went as far to eclipse its previous all-time high of 12,801,693 addresses from December 17, 2024, to a new milestone of 12,972,926 addresses on May 22, 2025.

This supports our longer-term thesis that small addresses are accumulating and saving bitcoin, further catalyzed by increasing prices. This may be representative of a growing distribution of bitcoin and its adoption among the “average” person or everyday retail investor.

The number of addresses with more than \$1,000 has grown 142.1% since the beginning of 2023 from 5,301,636 addresses to 12,834,570 addresses as of the end of Q2 2025.

Note: This metric is not 100% accurate due to price volatility during the time frame and address consolidation.

Bitcoin: Number of Addresses with Balance Over \$1,000



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Exchange Balance

This metric shows how many bitcoin are held on known exchanges.

Since 2022, this number has continued its downward trend due to shifting custody style preferences and the emergence of new channels for bitcoin exposure including the launch of spot bitcoin ETPs as well as “Bitcoin Treasury Companies.”

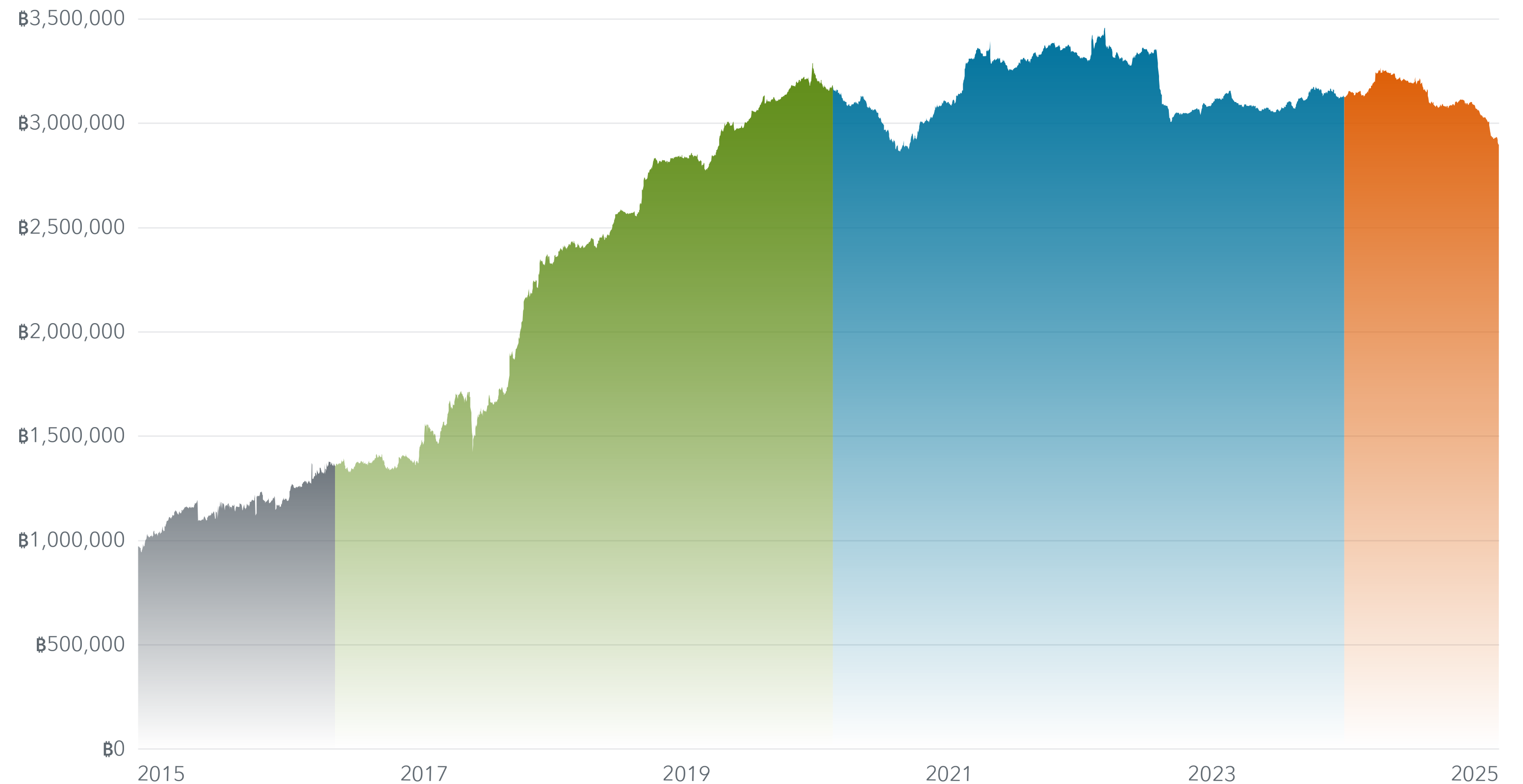
Q2 2025 saw this downward trend continue, breaking below 3 million bitcoin held on exchanges. This number declined by 6.4% quarter over quarter and is down 16.2% since its all-time peak in 2022.

As mentioned in the “Liquid vs. Illiquid Supply” section, exchange balances *can* and *will* react to price volatility. While voices in the industry may echo the common theme of a supply shock, both short- and long-term holders eventually send bitcoin back to exchanges to be sold. This is especially true when bitcoin’s price is continuously setting new all-time highs during bull markets.

While we use this metric to show trends in the market, it highlights the importance of not relying on a single metric. This metric may continue to change as addresses are identified or claimed by new or existing exchanges.

Bitcoin: Exchange Balance

■ Epoch 2 ■ Epoch 3 ■ Epoch 4 ■ Epoch 5



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Q2 2025 Signals Report

BITCOIN

Measurement Breakdown | Data to Watch

ETHEREUM

Measurement Breakdown | Data to Watch

SHORT-TERM (<1 YEAR)	Commentary	Overall Condition: NEGATIVE
Is Price Trading Above the 200-Day?	No, 1% lower than 200-Day	NEGATIVE
Golden Cross or Death Cross?	Death cross formed on March 1, 2025	NEGATIVE
Price > Realized Price	Yes, price is 23% higher than realized price	POSITIVE
MID-TERM (1-5 YEARS)	Commentary	Overall Condition: POSITIVE
MVRV Z-Score	Close to "Undervalued" threshold	POSITIVE
Ethereum Market Cap Ratio of Bitcoin	Continued to drop to lowest values seen since 2020 while longer-term trend is still positive sloping	NEGATIVE
NUPL Zone	Reached "Optimism" zone	POSITIVE
Percent in Profit	62% of addresses in profit	NEUTRAL
LONG-TERM (>5 YEARS)	Commentary	Overall Condition: POSITIVE
Monthly Address Metrics	Significant increase in all monthly metrics after a soft Q1 2025	POSITIVE
New Address Momentum	Short-term address growth exceeds long-term average, golden cross maintained since November 19, 2024	POSITIVE
Layer 2 Transaction Count	Layer 2 transactions increased 4%	NEUTRAL
Staking by the Numbers	Validator count rose 1.7% while total staked ether increased 3.4%	POSITIVE
Net Issuance and Burn Rate	Annualized inflation rate of 0.72% during Q2 2025	NEGATIVE

Ether Rebounds 37% in Q2 2025, Possible Golden Cross Approaching

Ether entered “death cross” territory at the beginning of March 2025 and remained there throughout the first half of the year. However, Q2 2025 showed significant strength as price rose by 37%. The 50-day SMA is now less than 1% below the 200-day SMA, which suggests a golden cross could soon form, indicating further acceleration for a rebound.

Ether’s price was at a clear inflection point as Q2 2025 ended. The longer-term SMA could act as resistance, or the price may break above it, forming a golden cross and turning it into a support level. That said, since 2022, the longer-term SMA has not consistently served as a significant support or resistance level, with the price frequently breaking through in both directions.

Ethereum: Price vs. 50-Day vs. 200-Day

■ Ether Price ■ 50-Day SMA ■ 200-Day SMA



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

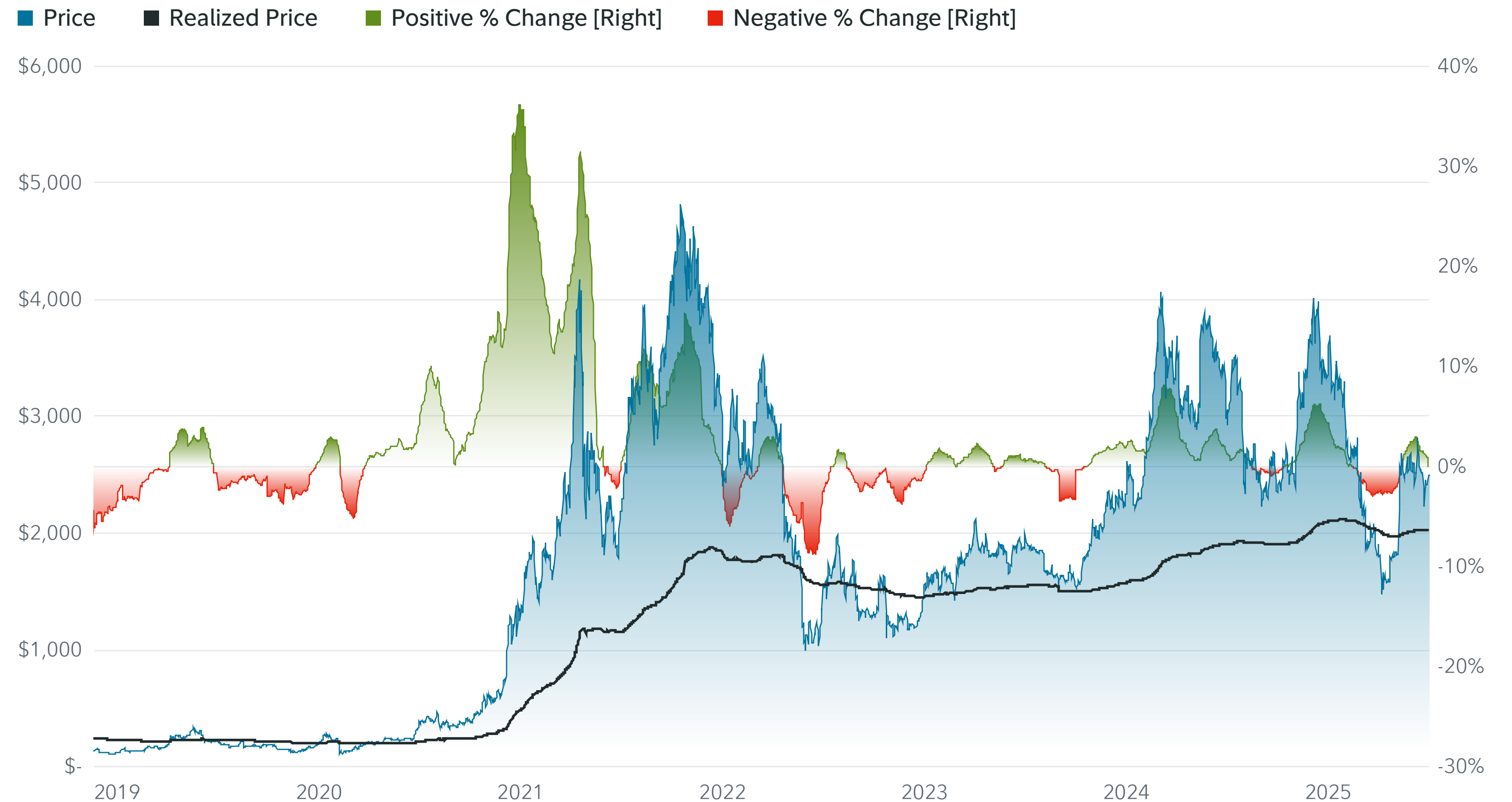
Realized Price

Realized price is a metric that aims to capture the average cost basis of all current token holders. By capturing a token's last traded price, tokens that are presumed to be lost can be discounted.

Ether's realized price remained nearly unchanged this quarter, rising by just \$2, or 0.1%, compared to a 37% increase in the market price. This minimal movement in realized price relative to the market price suggests that recent price action may be driven primarily by short-term holders, while long-term holders remain largely inactive.

Ether's market price now sits 23% above its realized price, after briefly dipping below it in Q1 2025. Historically, the realized price has served as an accumulation zone, offering a loose support level from which the market often rebounds. The first half of 2025 followed that pattern, with ether's market price falling well below its realized price for a short period before recovering above it. With the market price now comfortably above the realized price, we do not view ether as overextended. In past bull markets, ether has often traded at more than double its realized price.

Ethereum: Price vs. Realized Market Cap % Change



Source: Fidelity Digital Assets Research via Glassnode, 06/29/2025.

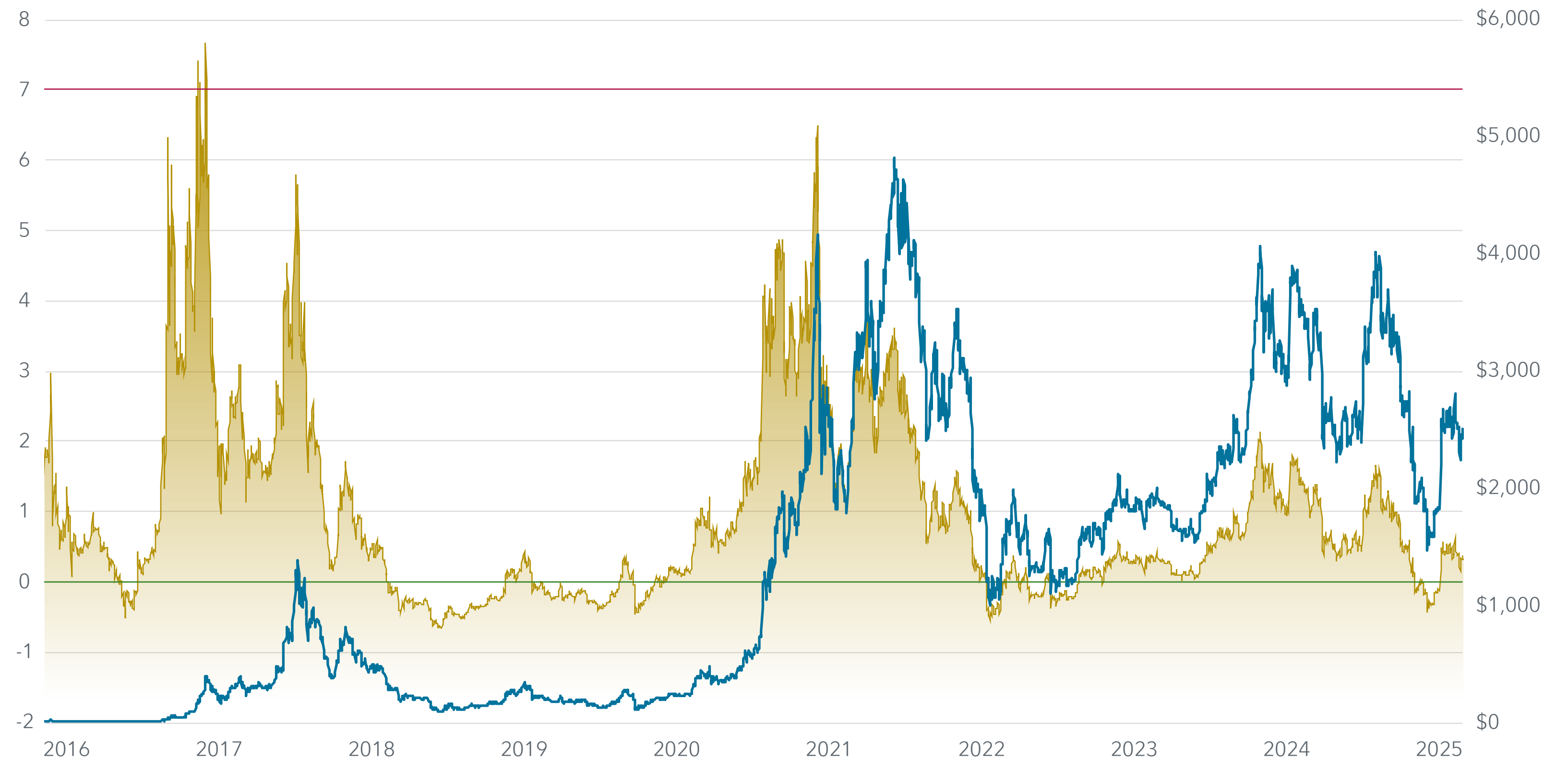
MVRV Z-Score

The MVRV Z-Score is used to assess when ether is over/undervalued relative to its “fair value.” When the market value is significantly higher than the realized value (acquisition price), it has historically indicated a market top (red zone), while the opposite has indicated a market bottom (green zone). The current MVRV Z-Score is 0.36 indicating that ether’s still extremely close to the undervalued side of the historical range even after its large rebound in price this quarter.

Ether has historically remained below or near the zero mark for extended periods of time associated with the four-year cyclical bear markets of the digital assets industry. This case may be unique for several reasons, but when looking at this metric alone, ether appears relatively undervalued based on the difference between its market value and realized value and has historically remained at this level for some time.

Ethereum: MVRV Z-Score

■ MVRV Z-Score ■ Undervalued ■ Overvalued ■ Ether Price [Right]



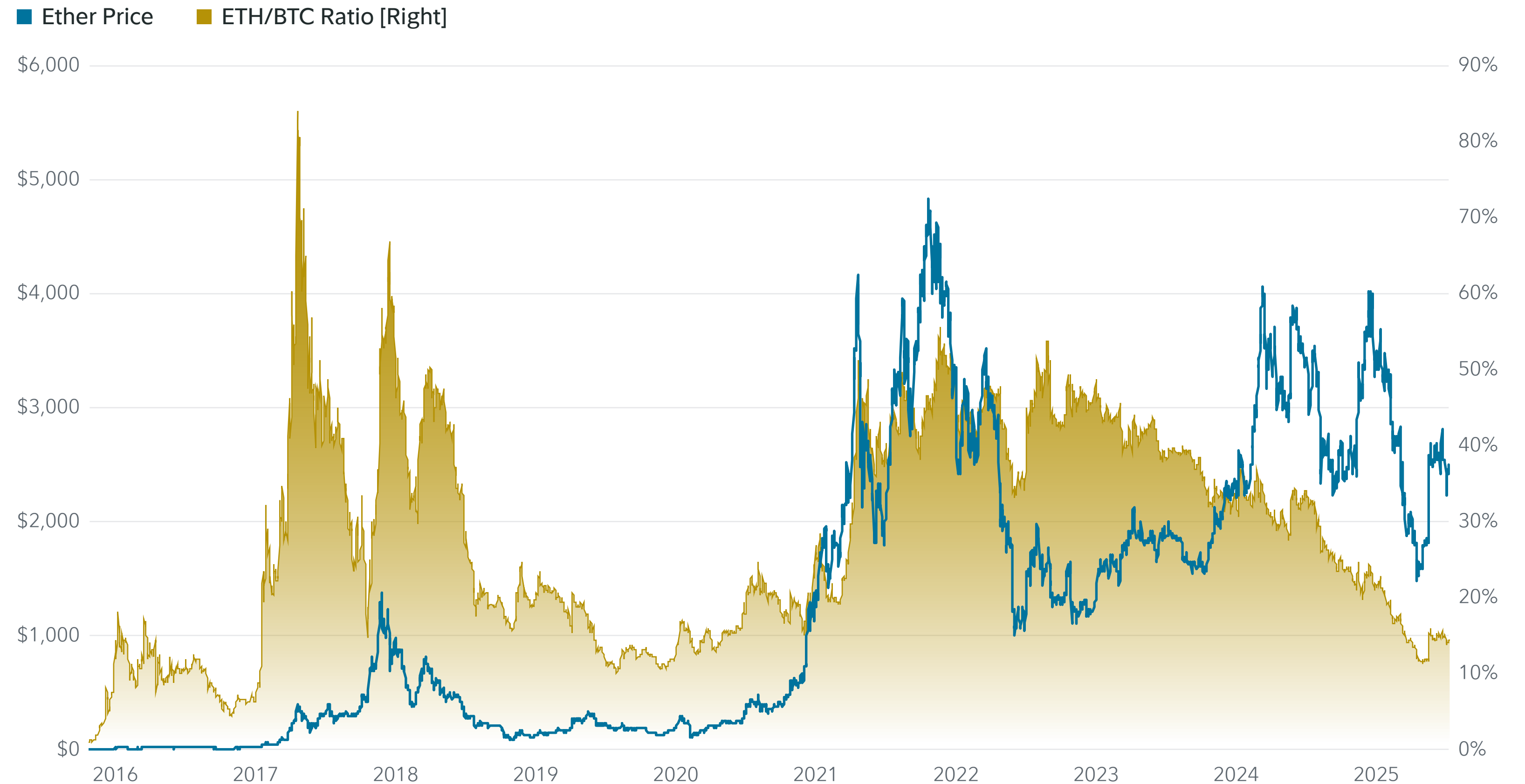
Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Ethereum Market Cap Ratio of Bitcoin

This metric is calculated by dividing the market cap of Ethereum by the market cap of Bitcoin. The observed change in the ratio over time helps investors understand the relative size and performance of Ethereum compared to Bitcoin.

Ethereum's market cap relative to bitcoin's has been on a consistent decline since the end of 2022, marking 34 consecutive months of this trend. This ratio is now at levels last seen in mid-2020 with a value of 0.14. While this may seem bearish, it could be attributed to bitcoin's massive success and the overextension of ether during the 2021 cycle. Looking at the full-time scale, ether is still up in bitcoin terms but has cooled off significantly. However, bitcoin's current success could be seen as ether's future opportunity, suggesting that we may eventually see a rally from ether relative to bitcoin.

Ethereum: Market Cap Ratio of Bitcoin

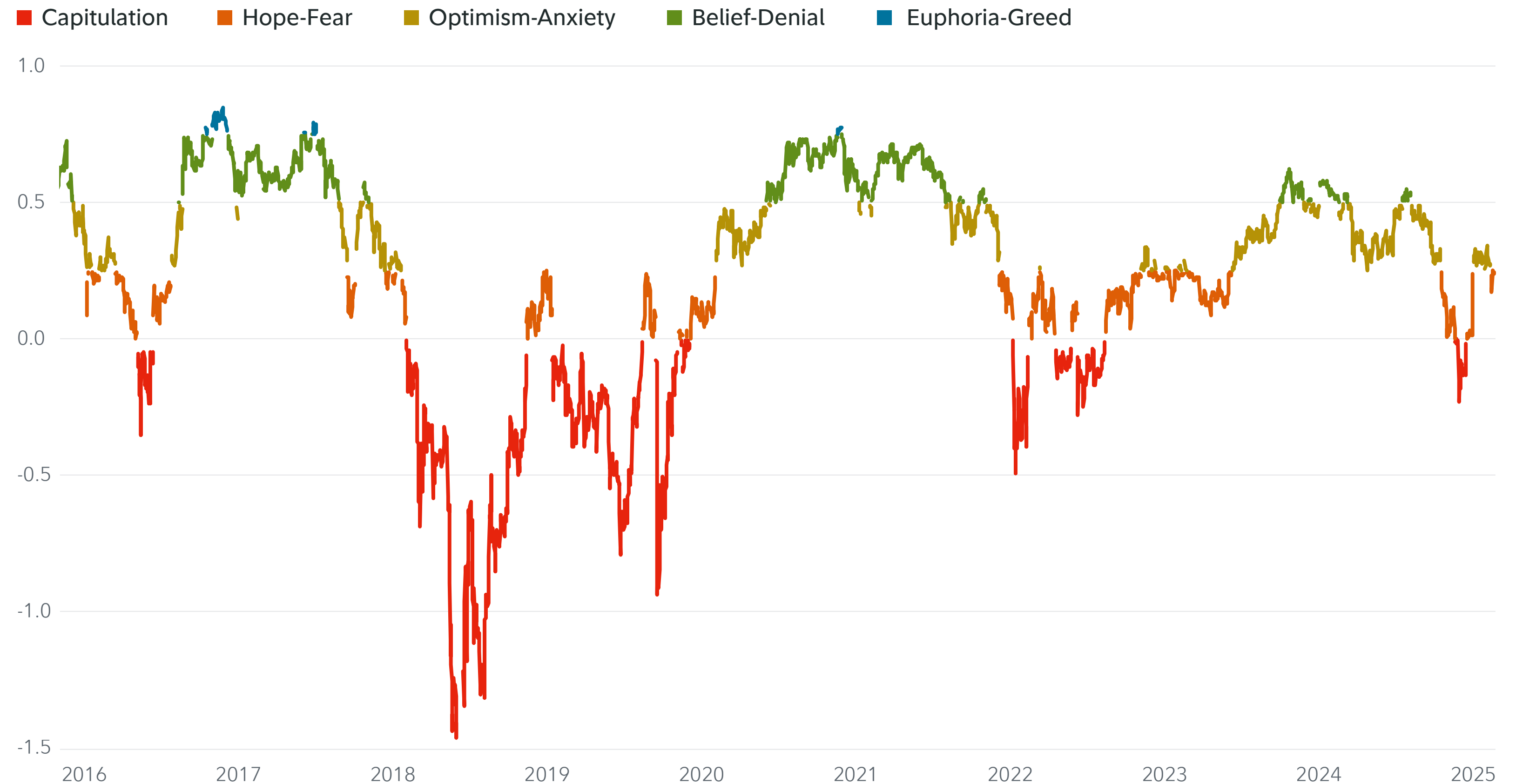


Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Net Unrealized Profit/Loss (NUPL) Ratio

Historically, this metric has been useful for assessing overall market sentiment. The chart titled “Ethereum: Net Unrealized Profit/Loss (NUPL)” shows that overall sentiment started the quarter in “Capitulation” with a value just below zero and ended the quarter in the “Optimism” zone at 0.26. The recent 37% surge in ether’s price quickly lifted the NUPL score from its lows, bringing it closer to the midpoint of the historical range. This positioning suggests that ether still has significant upside potential, as the “Euphoria” zone—typically associated with market cycle tops—does not begin until a value of 0.75.

Ethereum: Net Unrealized Profit/Loss (NUPL)



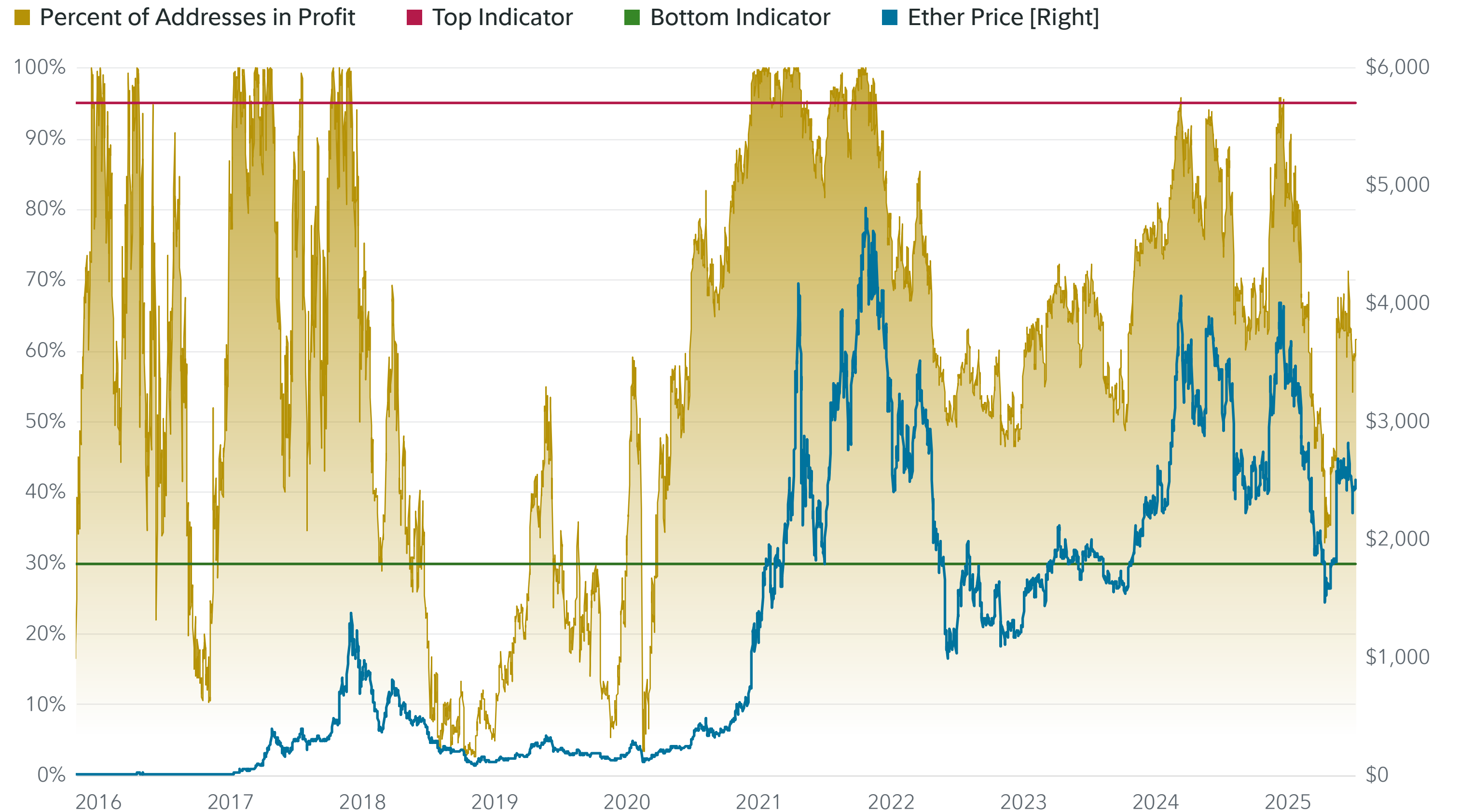
Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Percent in Profit

Percent in profit is the percentage of unique addresses with funds that have an average buy price lower than the current price. The buy price is defined as the price at the time coins were transferred to an address. Only externally owned addresses (EOAs) are counted. This metric has not touched the bottom indicator since January 2020, which may be because ether is not necessarily considered a buy-and-hold asset. Ether owners may be using ether for trading, smart contracts in decentralized finance (DeFi) services, staking, or buying other digital assets.

The percent of addresses in profit increased 41% in Q2 2025, with 62% of addresses in profit. The bottom indicator proved to be at an appropriate level this past drawdown unlike what was seen in the 2022 and 2023 lows of the market where it only reached a low of 55%. Given that we are still sitting near the lows of the previous bear market, it is possible that there is more room to the upside in this metric even after the 41% bounce seen during Q2 2025.

Ethereum: Percent of Addresses in Profit



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

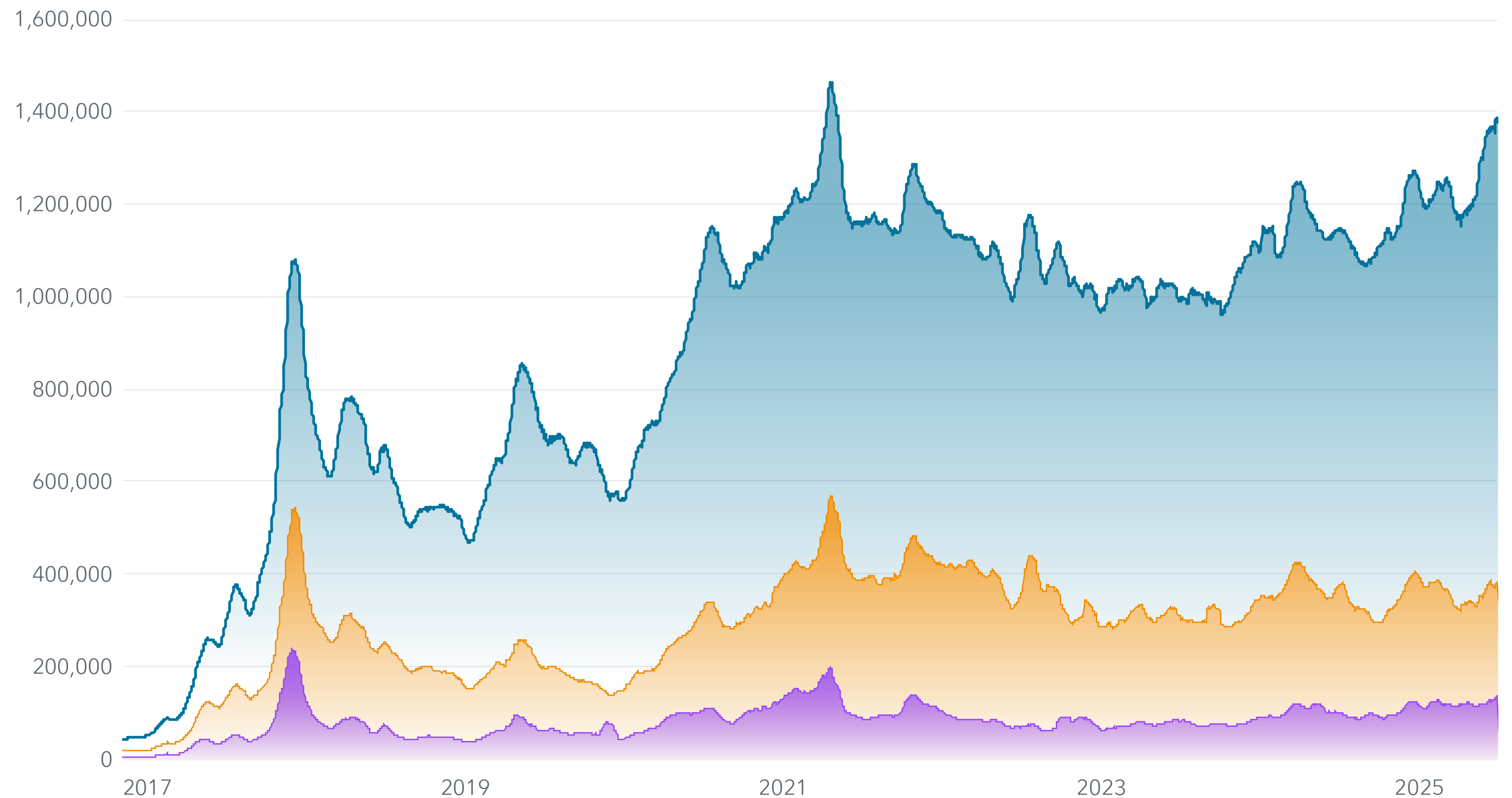
Monthly Address Metrics

Ethereum base layer fundamentals showed strong growth this quarter. Monthly address metrics all rose significantly in Q2 2025 following a lull in the previous quarter. New addresses increased by 19.8%, active addresses rose by 16.4%, and transaction counts grew by 17.5%.

The rise in Ethereum's gas limit may finally be showing with transactions almost reaching levels seen in 2021 while still offering lower cost transactions. We will look to see if the baseline for transaction counts increases going forward or if demand will remain constant while users enjoy lower transaction costs.

Ethereum: Monthly Metrics

New Addresses Active Addresses Transaction Count



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

New Address Momentum

New addresses are defined as unique addresses that appeared for the first time in a transaction. New addresses appear when users create new wallets and transact with them. This is different from Bitcoin addresses because Ethereum wallets do not typically create a new address for each transaction. Because of this difference, this metric could indicate a clearer picture of Ethereum's Layer 1 adoption.

Throughout Q2 2025, our new address momentum metric has stayed in its golden cross pattern, with the shorter-term average remaining above its longer-term counterpart. The market was on the lookout for a bounce or cross of the moving averages during Q1 2025, with the former occurring in clear fashion. This indicates that new addresses are continuing to interact with the network at a faster rate than the one-year average. This line has been upward sloping since the beginning of 2024, showing an increasing adoption rate during this period.

Ethereum: New Address Momentum

■ New Addresses ■ 30-Day SMA of New Addresses ■ 365-Day SMA of New Addresses



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Layer 2 Transaction Count

Since the Deneb-Cancun upgrade, transactions on Layer 2 platforms have become significantly more cost-effective, boosting both Layer 1 bridge activity and the overall Layer 2 transaction count. After a notable decline in Layer 2 transaction counts in Q1 2025, Q2 2025 saw a modest rebound, with transactions increasing by approximately 4%, or about 500,000 by the quarter's end.

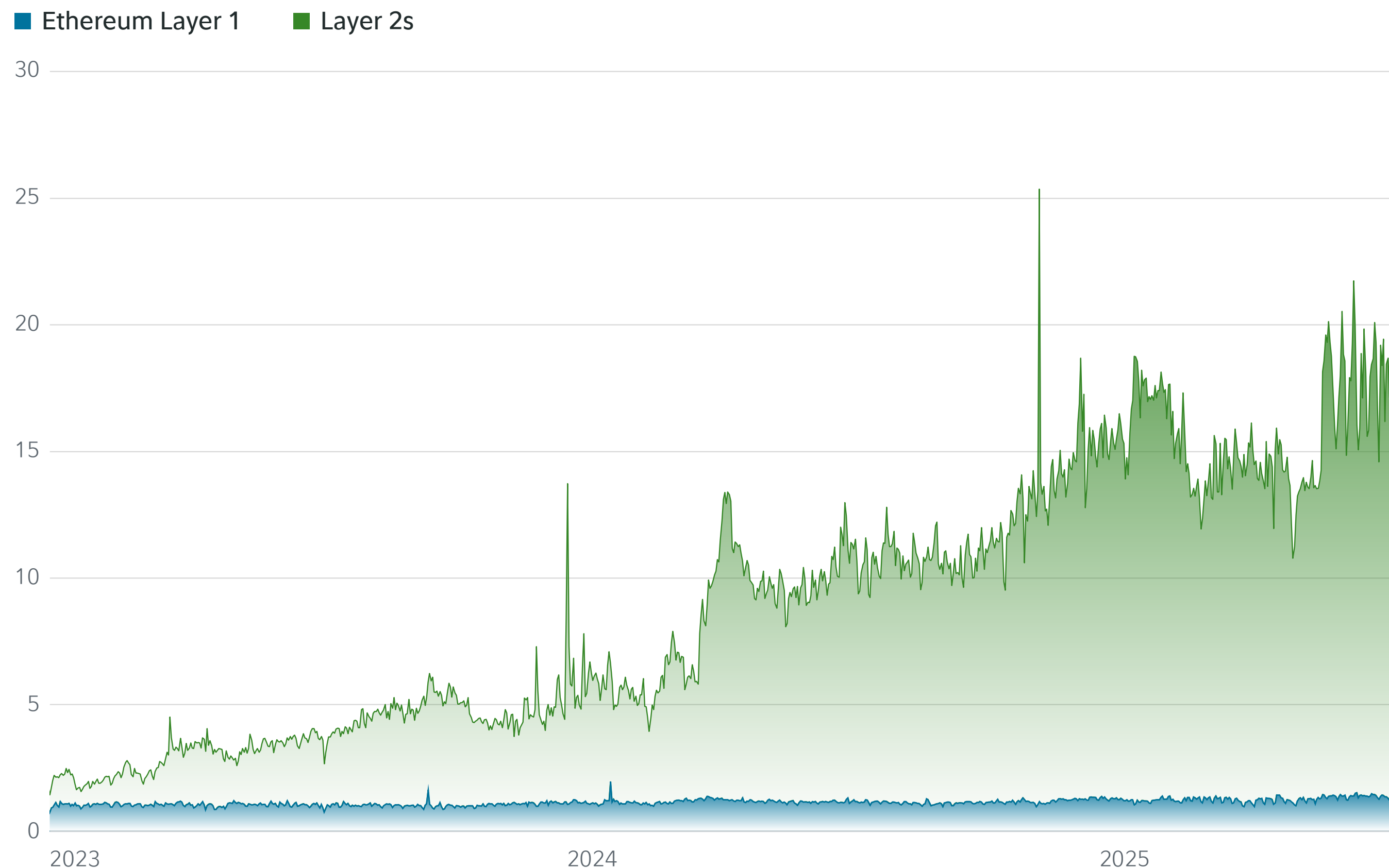
May's Pectra upgrade doubled the capacity of blobs used to support Layer 2s, and we previously theorized that this would trigger a significant uptick in Layer 2 activity due to even lower fees. However, that expectation proved overly optimistic. Transaction fees on Layer 2s were already low prior to the upgrade and have remained relatively stable, largely due to the complexities of the blob market and the batch posting behavior of Layer 2 networks.

Nonetheless, Q2 2025 marked a solid recovery for Ethereum's rollup-centric roadmap. As more Layer 2 platforms continue to onboard and mature, we anticipate this segment will begin to generate more meaningful revenue for the network over the coming years.

It is important to remember that the Layer 2 space is still in its infancy and new projects are continually emerging. Consequently, our total Layer 2 transaction count does not encompass every available Layer 2, and the actual value is higher than what is shown here. Our count includes transactions from chains such as Optimism, Base, Arbitrum, ZKsync, Zora, Scroll, Blast, Linea, Mantle, Starknet, World Chain, and Mode.

Lastly, it is common for both new and existing Layer 2s to incentivize network activity, often through airdrops. This factor should be carefully considered when analyzing these metrics, as it would be misleading to attribute all activity solely to the utility of each Layer 2.

Ethereum: Network Transaction Count (Millions)



Source: Fidelity Digital Assets Research via Dune Analytics, 06/29/25.

Staking Numbers and Validators

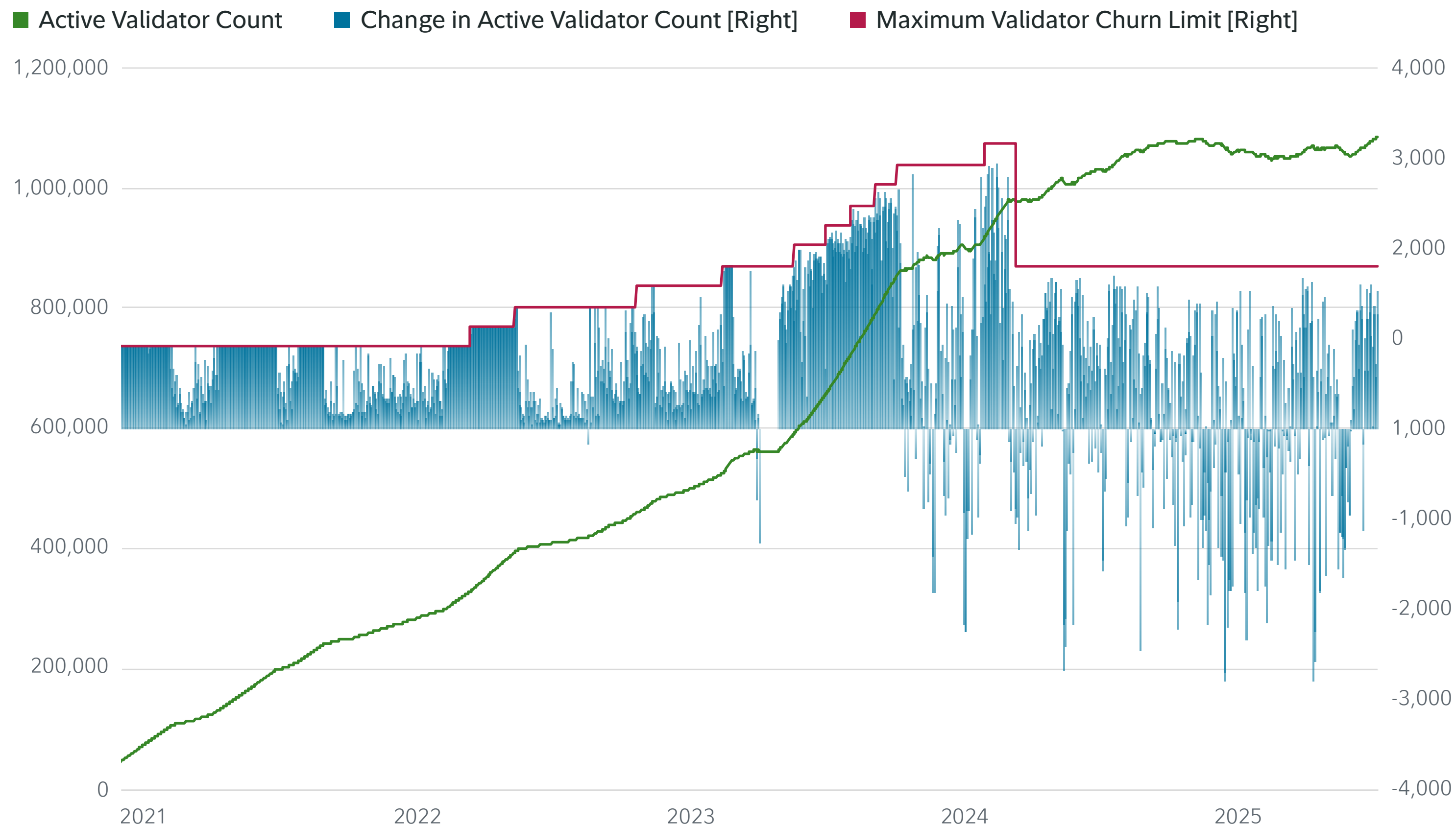
“Proof-of-Stake Change in Active Validators” illustrates the maximum number of validators permitted to join the network within a specific timeframe, along with the observed net change. After the change to the maximum effective balance of validators occurred in May, the amount of staked ether and the active validator count have both risen substantially.

The goal of the change was to reduce the total number of validators on the network by allowing more ether to be held on a single validator. In theory, this would decrease the validator count without affecting the total amount of staked ether. However, due to exceptionally high demand for staking this quarter, both the number of active validators and the total staked ether increased substantially.

The number of active validators rose by 1.7% (17,806) specifically, while the amount of staked ether grew by 3.4% (1,168,328 ETH). Although the intended reduction in validator count has not materialized yet, the slower growth in validator numbers relative to staked ether suggests that the change is having the desired effect—fewer validators are now needed to support a larger amount of staked ether.

While not a definitive success just yet, the adjustment to the maximum effective balance appears to be working as intended. It simply has not been enough to offset the surge in staking demand. Over time, we expect the number of active validators to decline more frequently as validators consolidate and as staking demand fluctuates.

Ethereum: Proof-of-Stake Change in Active Validators



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Net Issuance and Burn

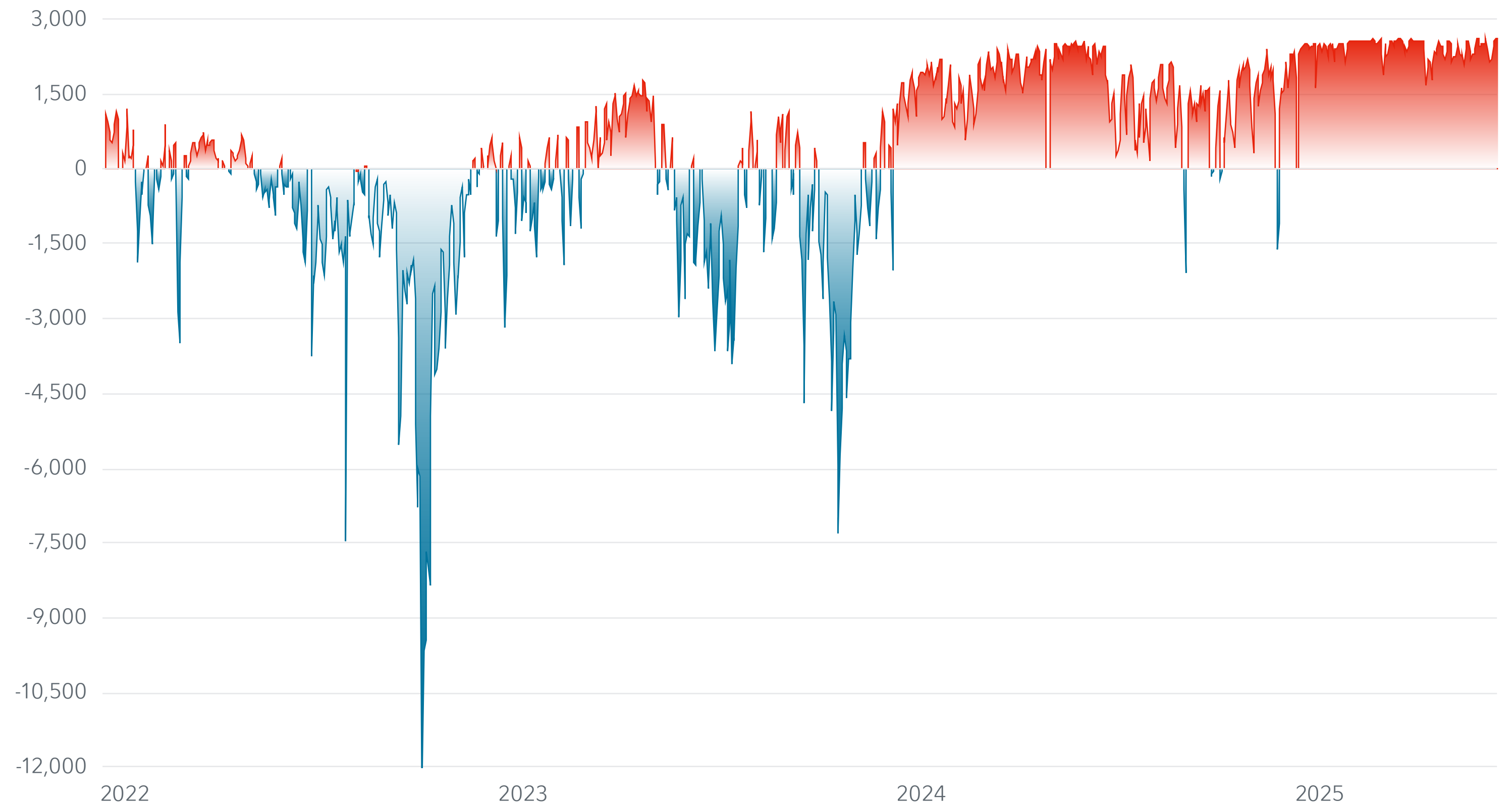
Since The Merge in September 2022, Ethereum’s net issuance (the new supply issued by the network minus the supply burned from transactions) has led to an increase in supply of 402,787 ether, or a change of 0.33%.

The inflationary and deflationary changes in supply are heavily influenced by the demand for staking—which drives issuance higher—and transactions that burn ether. Q2 2025 recorded zero days of net deflation in ether’s supply, as recent increases to the gas limit and the introduction of blobs expanded block space beyond current demand. This supply-demand imbalance made Q2 2025 the most inflationary quarter since The Merge in 2022, with a total of 217,612 ether added to the circulating supply. This represents a 0.18% increase in supply for the quarter, equivalent to a 0.72% annualized inflation rate.

This dynamic is important for investors to understand because, although Ethereum’s supply is not fixed, it remains quite stable over long periods, contributing to its sound properties as a monetary asset. Given that Ethereum developers remain focused on accelerating the scaling roadmap—prioritizing lower transaction costs and higher throughput to remain competitive—it is expected that ether’s supply will continue to trend inflationary in the near term. These trade-offs reflect the network’s strategic shift toward usability and scalability, even at the cost of temporarily higher issuance.

Ethereum: Daily Net Issuance

■ Deflationary Supply Change ■ Inflationary Supply Change



Source: Fidelity Digital Assets Research via Glassnode, 06/29/25.

Q2 2025 Signals Report

By Fidelity Digital Assets® Research

Interested in discussing how these signals can help
inform your digital assets investment strategy?

Fill out [this form](#) and a member of the Fidelity Digital Assets® team will reach out to you.

Contributors:

Daniel Gray – Senior Research Analyst, Fidelity Digital Assets®

Max Wadington – Research Analyst, Fidelity Digital Assets®

Matt Hogan – Research Analyst, Fidelity Digital Assets®

Q2 2025 Signals Report

By Fidelity Digital Assets[®] Research

Disclosures

The information herein was prepared by Fidelity Digital Assets, National Association (“FDA, NA”) and Fidelity Digital Assets, Ltd (“FDA, LTD”). It is for informational purposes only and is not intended to constitute a recommendation, investment advice of any kind, or an offer to buy or sell any asset. Perform your own research and consult a qualified advisor to see if digital assets are an appropriate investment option.

Digital assets are speculative and highly volatile, can become illiquid at any time, and are for investors with a high-risk tolerance. Investors in digital assets could lose the entire value of their investment. Digital assets are not insured or guaranteed by the Federal Deposit Insurance Corporation, or any other government agency, and are not obligations of any bank.

Custody and trading of digital assets are provided by FDA, NA, which is a national trust bank. FDA, LTD relies on FDA, NA for these services. FDA, LTD is registered with the Financial Conduct Authority under the U.K.’s Money Laundering Regulations. The Financial Ombudsman Service and the Financial Services Compensation Scheme do not apply to the cryptoasset activities carried on by FDA, LTD.

To the extent this communication constitutes a financial promotion in the U.K., it is issued only to, or directed only at, persons who are: (i) investment professionals within the meaning of Article 19 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the “FPO”); (ii) high net worth companies and certain other entities falling within Article 49 of the FPO; and (iii) any other persons to whom it may lawfully be communicated.

This information is not intended for distribution to, or use by, anyone in any jurisdiction where such distribution would be contrary to local law or regulation. Persons accessing this information are required to inform themselves about and observe such restrictions.

FDA, NA and FDA, LTD do not provide tax, legal, investment, or accounting advice. This material is not intended to provide, and should not be relied on, for tax, legal, or accounting advice. Tax laws and regulations are complex and subject to change. You should consult your own tax, legal, and accounting advisors before engaging in any transaction.

Some of this information is forward-looking and is subject to change.

Past performance is no guarantee of future results. Investment results cannot be predicted or projected.

Views expressed are as of the date indicated, based on the information available at that time, and may change based on market or other conditions. Unless otherwise noted, the opinions provided are those of the speaker or author and not necessarily those of Fidelity Digital Assets or its affiliates. Fidelity Digital Assets does not assume any duty to update any of the information.

Coin Metrics is a trademark of Coin Metrics Inc. Copyright © Coin Metrics, 2025.

Fidelity Digital Assets and the Fidelity Digital Assets logo are registered service marks of FMR LLC.

© 2025 FMR LLC. All rights reserved.

1213721.2.0

¹ <https://bitbo.io/news/bitcoin-mining-difficulty-drop-2025/>