The Digital Asset Conference

Digital Asset Report:
Institutional Perspective

Q4-2024

FASANARA DIGITAL + glassnode

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About

Fasanara Digital

Founded in 2011, Fasanara is a global asset manager overseeing $4 billion in assets under management. In 2018, we established Fasanara Digital, becoming one of the first institutional market-neutral funds focused on digital assets worldwide.

Currently managing $150 million, Fasanara Digital is one of the most active market participants in the space, leveraging our superior infrastructure and innovative strategies to provide liquidity and drive growth in the digital asset market.

Glassnode

Glassnode is the leading market intelligence provider in the digital asset space, primarily focused on institutions. Glassnode's platform delivers unparalleled on-chain analytics and deep insights into Bitcoin, Ethereum, and selected major digital assets.

Founded in 2017, Glassnode equips institutional investors, hedge funds, banks, and asset managers with near real-time, data-driven intelligence, enabling informed decision-making in a highly dynamic trading environment.

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Major Asset Dominance

Since the infamous collapse of the FTX exchange in late 2022, the digital asset ecosystem has experienced a period of constructive growth and recovery. This has been bolstered by increasing interest from institutional investors following the launch of regulated ETF instruments.

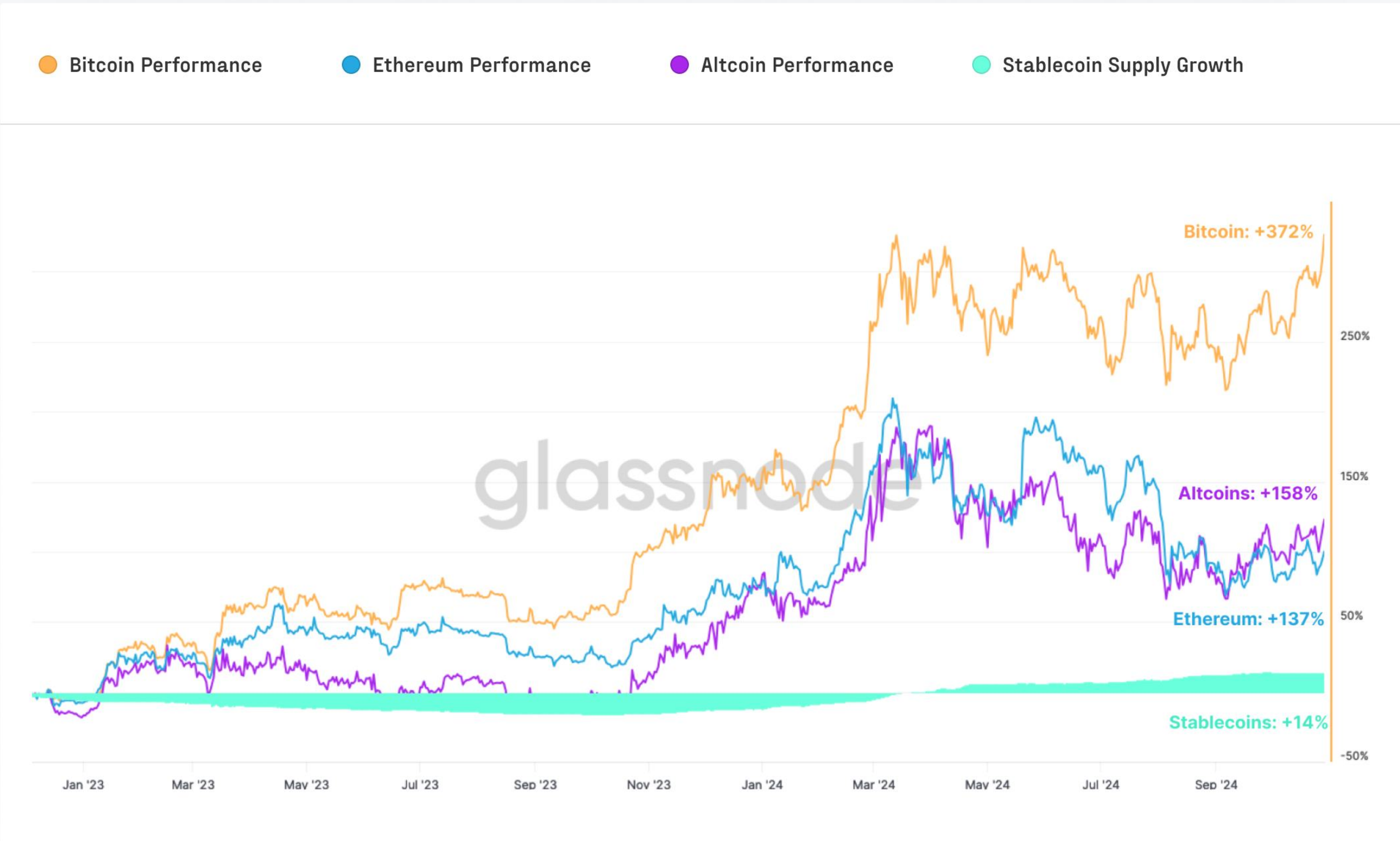
Bitcoin, the flagship asset for the cryptocurrency ecosystem, continues to grow both in size and maturity, with its market cap increasing by $1.13T (372%) since the Nov 2022 cycle low.

Growth for Ethereum and the broader Altcoin sector have been relatively similar in scale, recording a $182B (137%) increase and $336.9B (158%) over the same period, respectively. By this measure, Bitcoin has outperformed the altcoin sector by 214%, which has led to Bitcoin dominance rising from 38.7% to 58.5%

The aggregate stablecoin supply has continued to expand throughout 2024, accounting for more than $155B in USD-denominated value.

Market: Major Asset Dominance Performance Since Nov-2022

Data Source: Glassnode



Relative Major Asset Dominance

Since Nov 2022, the relative dominance of Bitcoin has consistently increased, rising from 38.7% to 58.5%. This suggests that capital has preferred to accrue towards the left-tail of the risk-curve, where liquidity, market depth, and asset recognition are highest.

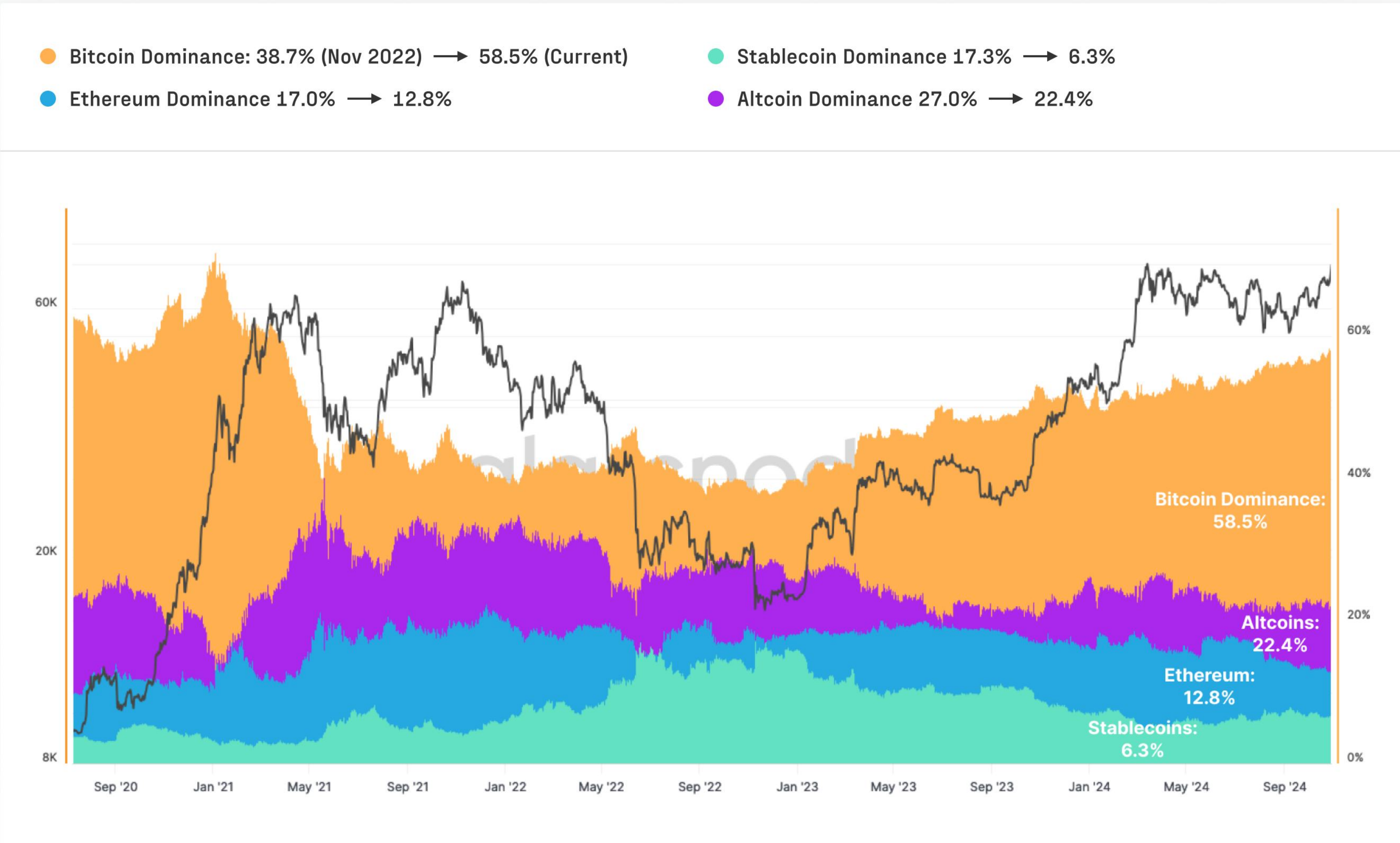
Stablecoins now represent 6.3% of the digital asset market, which is below the 17.3% peak set in late 2022, but is trending higher since the Bitcoin set a new ATH in March 2024.

Stablecoins have become the primary quote currency on both centralized, and decentralized exchanges, and are increasingly used as a medium of exchange, especially in emerging markets.

Ethereum has largely underperformed its peers following the Merge, completed in September 2022, with its market share declining from 17% to 12.8% since then. The remainder of the Altcoin sector has also experienced market share decline, highlighting a relative lack of new retail participation, and new capital inflows thus far.

Market: Major Asset Dominance

Data Source: Glassnode



Capital Rotation

Digital assets display an internal market cycle as capital rotates through various market sectors over time. We can model these capital rotations using on-chain data, measuring the 30-day change in capital flows into Bitcoin, Ethereum and the change in total stablecoin supplies.

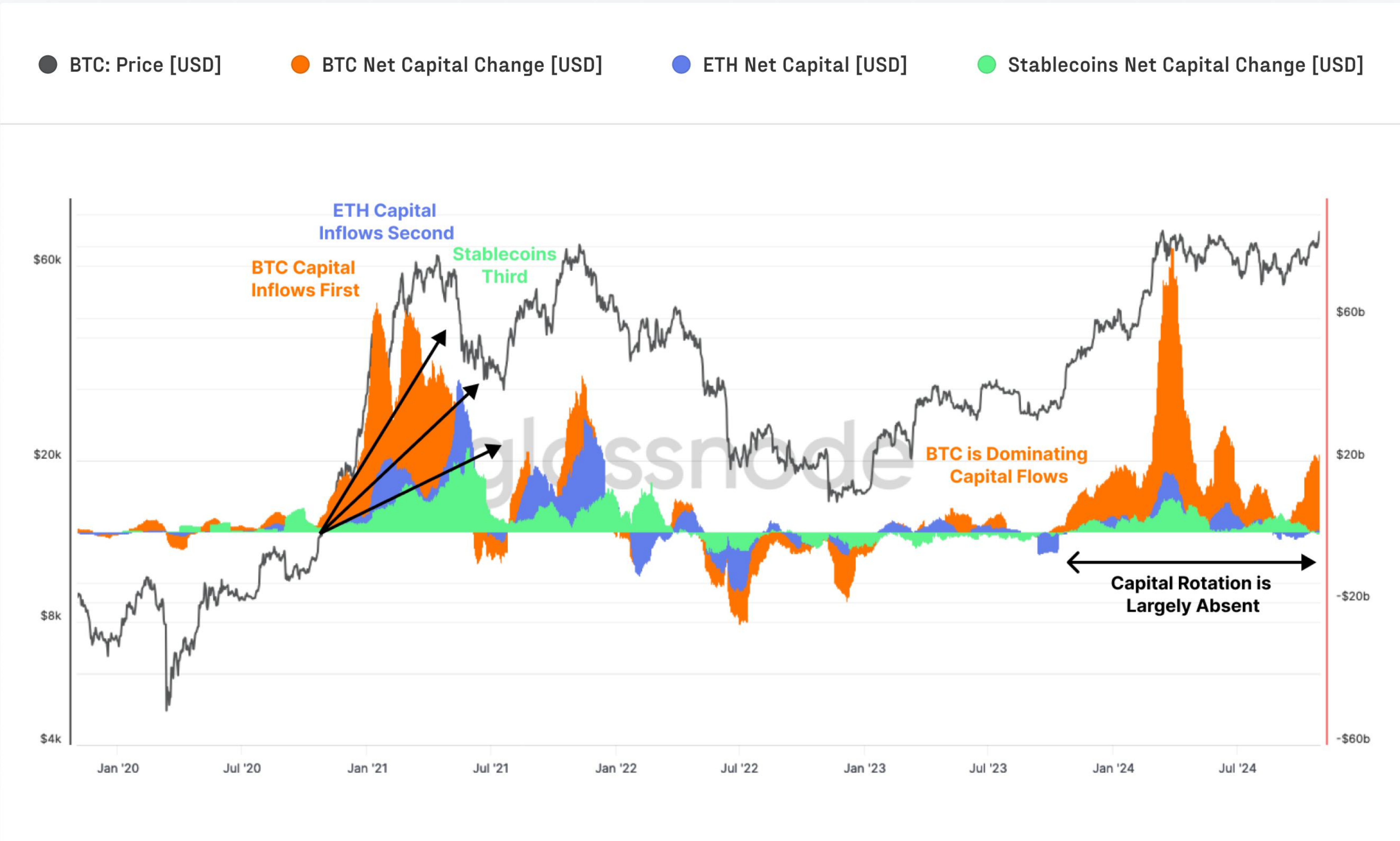
The Capital Rotation cycle typically sees value accruing within the majors, followed by a subsequent redistribution along the risk-curve.

This was clearly visible across the 2021 rally, with capital initially accruing to Bitcoin, followed by a rotation towards Ethereum. With stablecoins acting as the preferred quote currency for trade, the swelling of stablecoin supplies often points to more speculation, and investors heading further out on the risk curve.

This rotation phenomenon is largely absent in the 2023-24 current cycle so far, spotlighting a lack of retail participation, and a comparatively lower risk appetite.

Market: Market Realized Value Net Capital Change Breakdown

Data Source: Glassnode



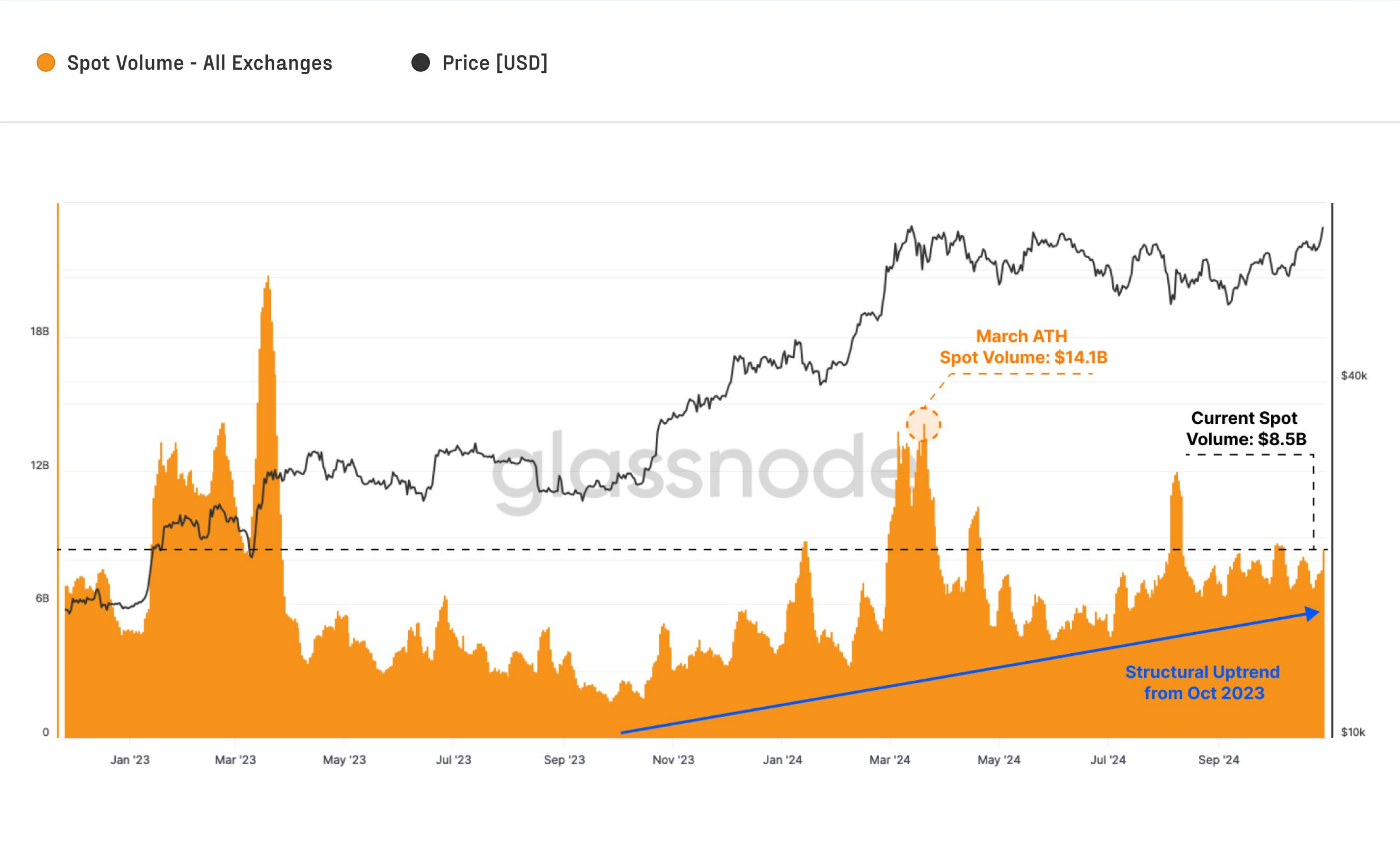
Spot Volume

The spot volume traded across major centralized exchanges peaked at a value of $14.1B across the March 2024 ATH and has continued to climb since May, currently sitting at $8.5B.

Since October 2023, we can observe a structural increase in volume suggesting a growing desire for trade, deepening liquidity, increasing trade volumes, and enabling capital allocators to position themselves without moving the market.

BTC: Spot Volume [USD]

Data Source: Glassnode



Aggregated CVD Across Top Exchanges

The Cumulative Volume Delta (CVD) metric can be used to estimate the net balance between market buying and selling pressure in spot markets.

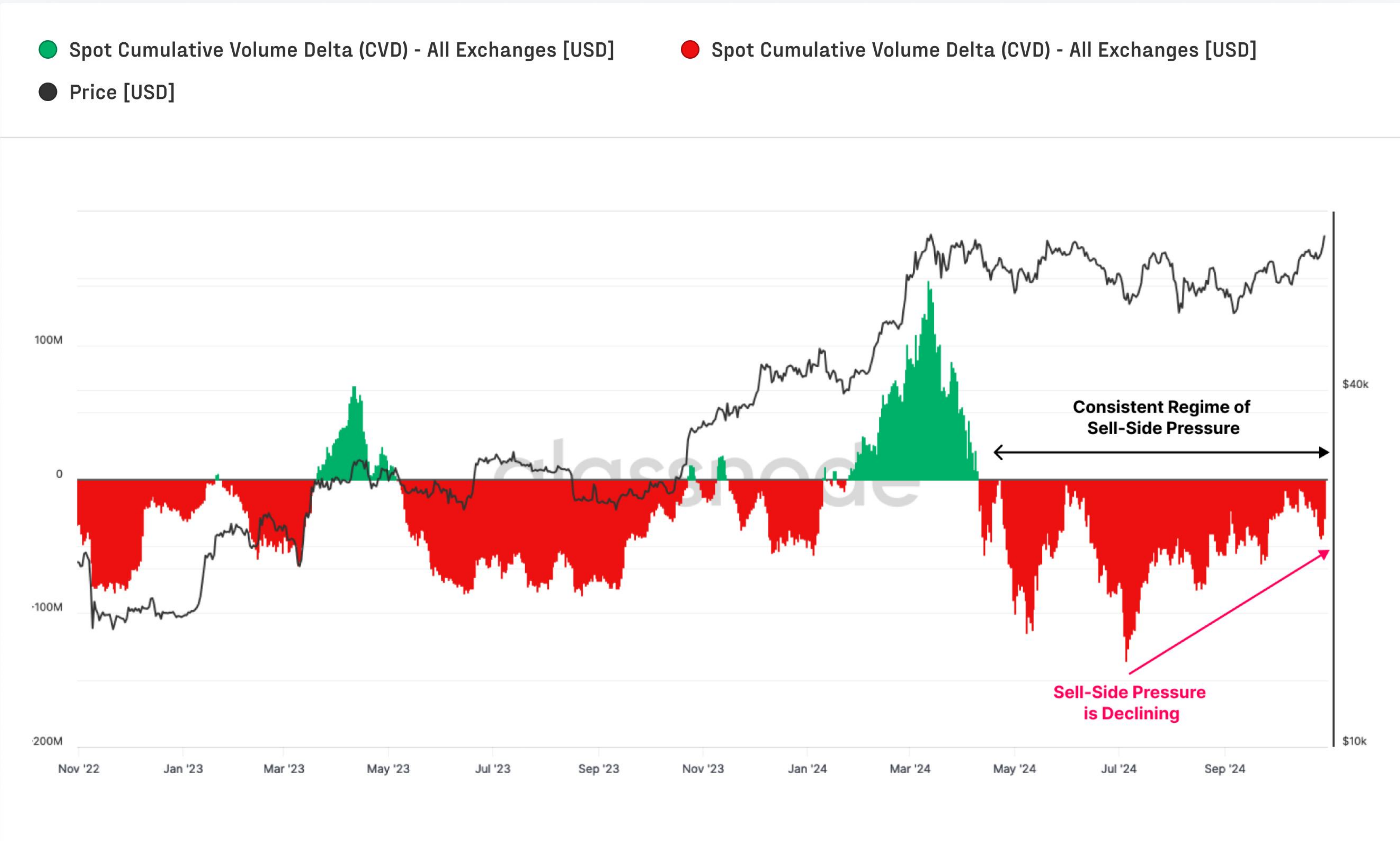
Since the formation of the March ATH, there has been a consistent regime of net sell-side pressure, which is in part associated with headline distribution by large entities.

Key examples of this include the long awaited Mt.Gox redistribution, the unwind of supply held within the GBTC product, and the liquidation of ~48k BTC by the German Government.

At present, there is an equilibrium between buying and selling pressure, as the market reaches the culmination of several months of range bound price action.

BTC: Spot Cumulative Volume Delta (CVD) [USD]

Data Source: Glassnode



Orderbook Depth

The chart displays the bid-ask spread for a $100k USD order on the Binance BTC-USDT pair, possibly the most liquid book in crypto. The left-hand side shows the spread in basis points (0.01%), and on the right-hand side and superimposed, the price of Bitcoin.

Historically it can be observed how spreads have widened during times of strong appreciation and high volatility, while a narrowing on the spread generally characterises a more stable market.

High volatility thins out liquidity and widens the spread as resting orders close to spot price are more frequently hit, additionally this leads to market makers widening the spread. A structural increase in the spread can be observed from August onward, coinciding with a resurgence in speculative trading activity.

Binance Spot Market Depth vs Price

Data Source: Fasanara Digital

Futures Open Interest

The derivatives markets for Bitcoin have experienced significant growth in recent years, as the asset class matures, and institutional adoption increases. Since 2021, futures markets have generally accounted for a majority of trade volume and open interest in the space.

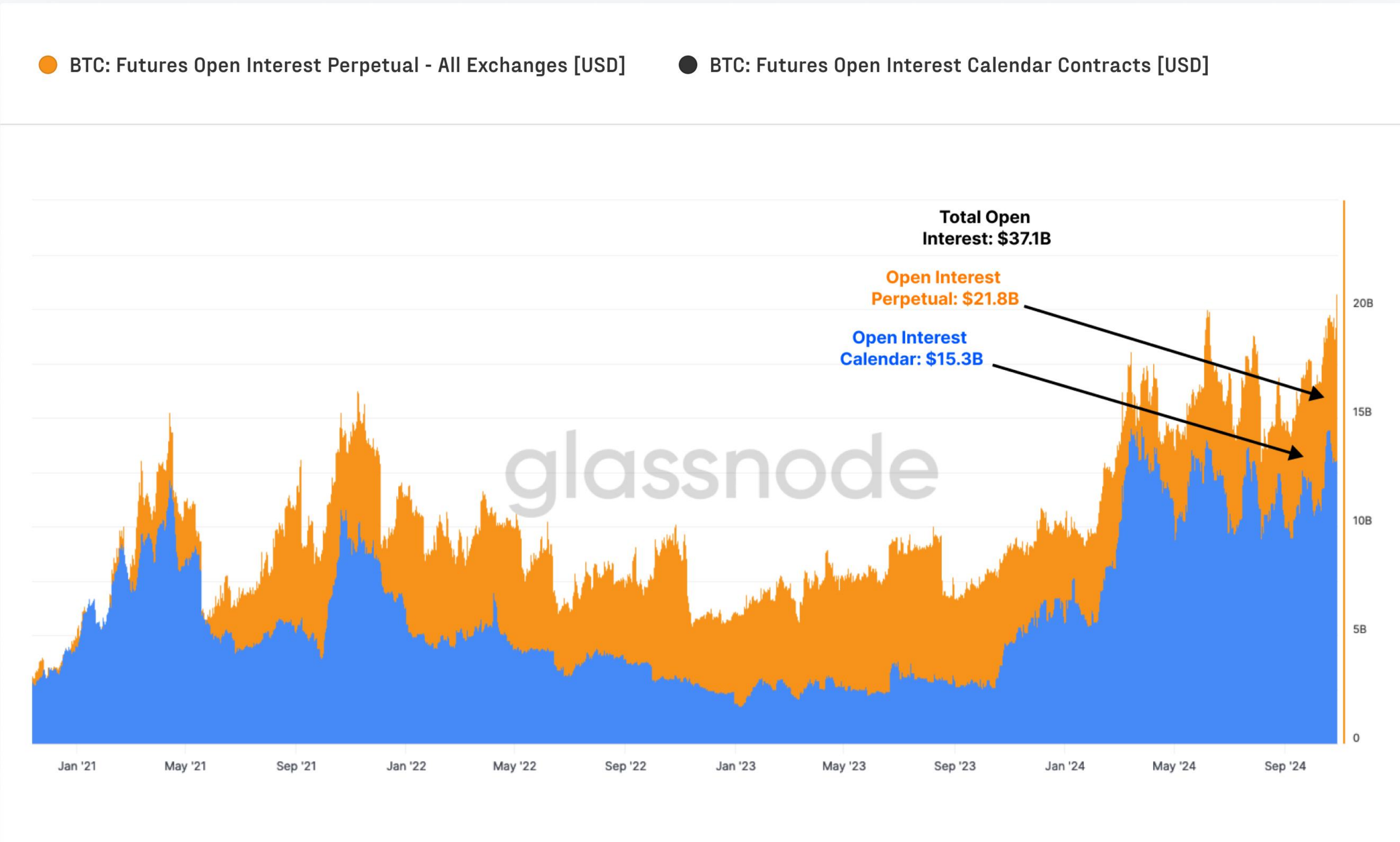
Perpetual Swap contracts have remained the preferred instrument of choice for crypto-native traders, however regulated CME Group derivative products have emerged as a dominant instrument since 2023.

This highlights a growing institutional demand for Bitcoin, with both directional positions, and cash-and-carry yield strategies in play.

Across both perpetual swap and calendar expiring futures, open interest has surged to an ATH of $37.1B this week, suggesting a meaningful uptick in leverage within the system. Notably, a large portion of CME open interest has been deployed to capture basis yield via a cash-and-carry strategy, often paired with spot ETF inflows.

BTC: Futures Open Interest Calendar and Perpetual

Data Source: Glassnode



Futures Volume

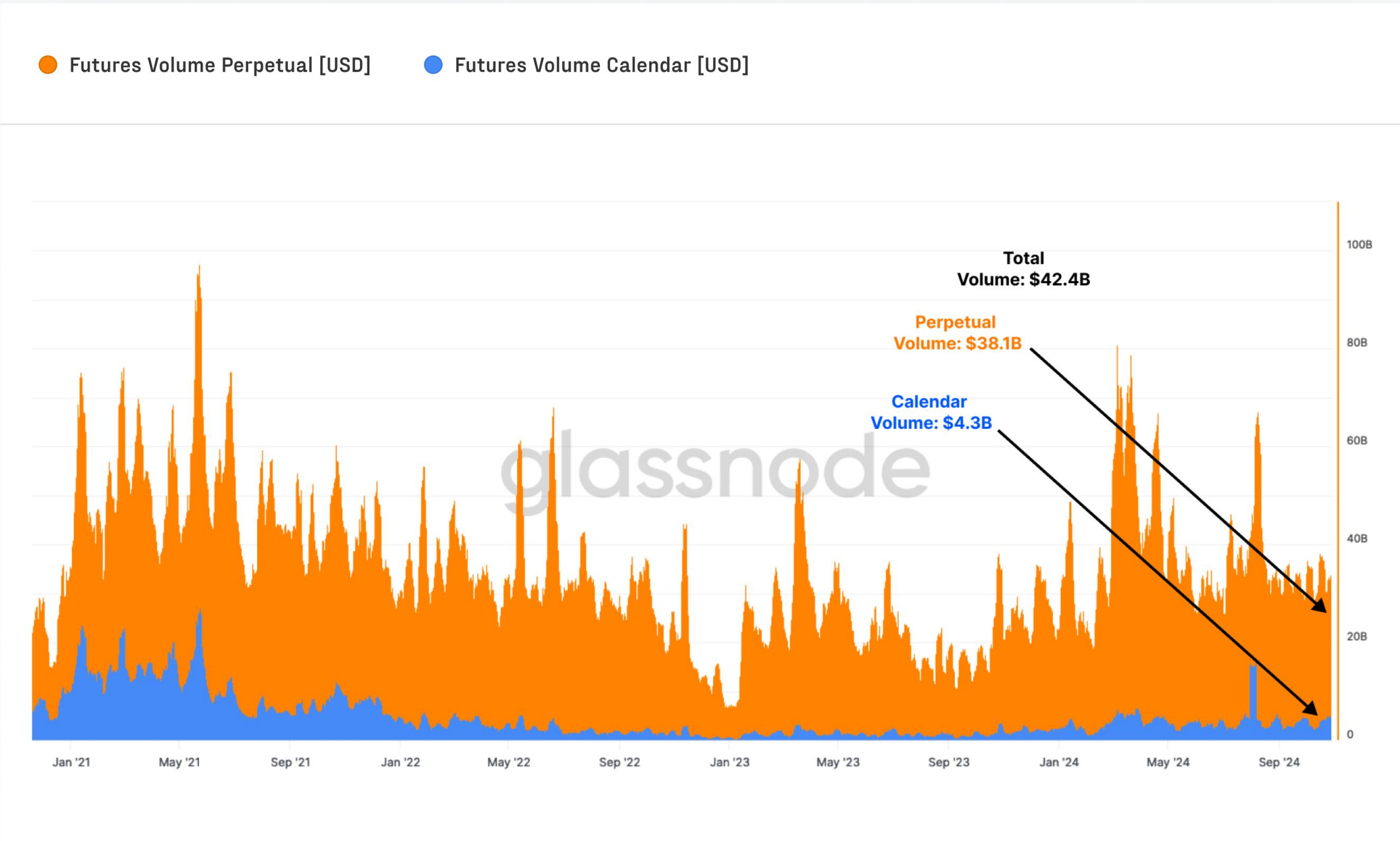
Trading volumes across all futures contracts total $42.4 billion per day, remaining relatively elevated but lower than the heightened volumes experienced across peak bull run phases such as the market ATH in March.

When comparing volume traded across different futures instruments, perpetual swaps remain the most liquid, recording an order of magnitude more trade volume compared to calendar expiring futures.

The lower volume for calendar expiring contracts suggests that these instruments are preferred for basis trade strategies, whilst perpetual swaps dominate for higher frequency trading.

Bitcoin: Futures Volume Calendar and Perpetual

Data Source: Glassnode



Perpetual Market Premium

By multiplying the funding rate with the current open interest in perpetual swap markets, we can estimate the cumulative monthly premium that long-side contracts have paid to the short side over the last 30 days. By this measure, we can see significant speculative interest as Bitcoin set a new ATH in March 2024, with the cost of carry at around $136M per month.

This indicator has plunged to just $40M per month as of late October, highlighting the significant market cool-down as the Bitcoin price traded range bound for several months. However, there are initial signs of an uptick in premium paid as the market starts to rally back toward the ATH.

Bitcoin: Perpetual Market Directional Premium

Data Source: Glassnode

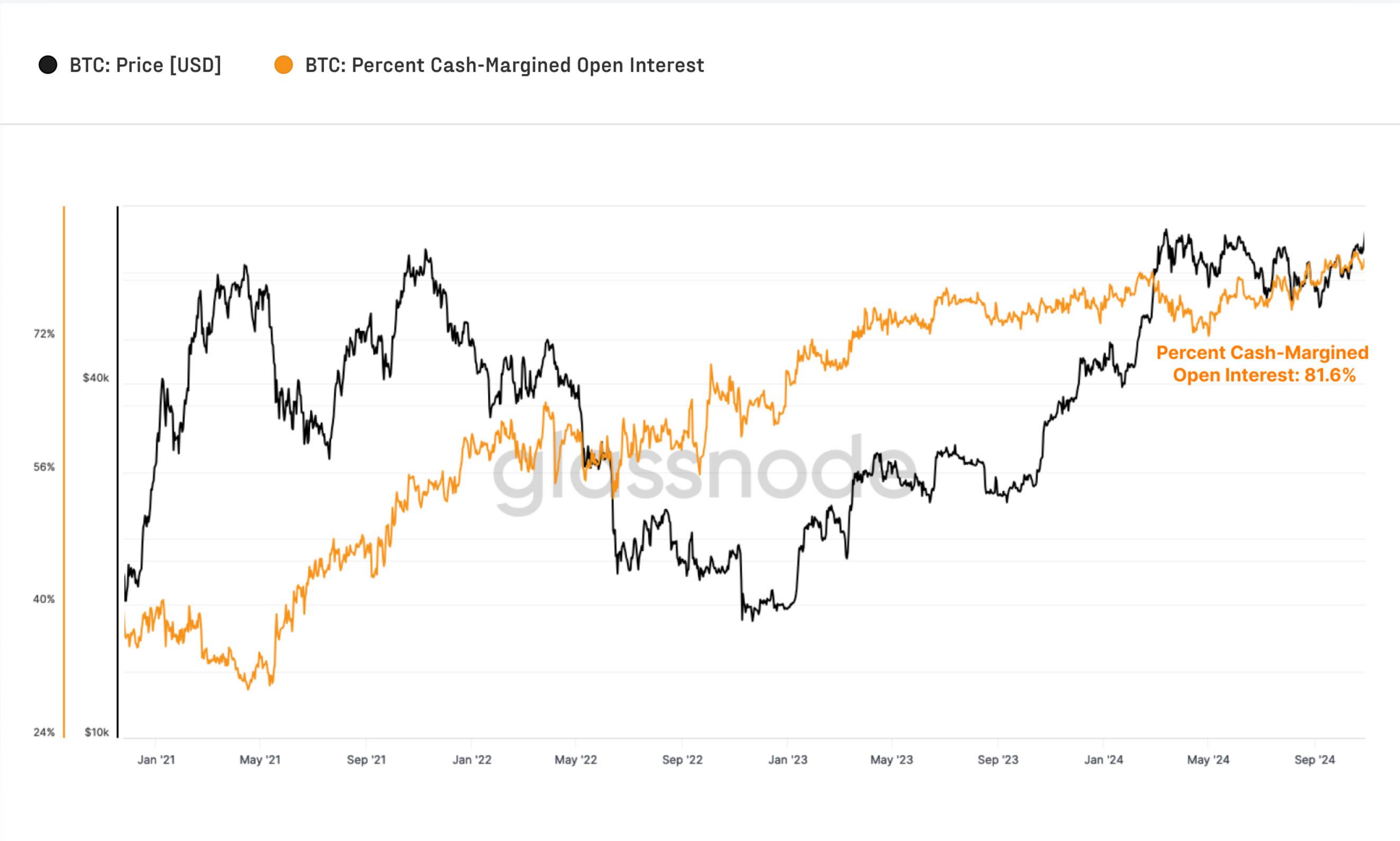
Futures Collateral Structure

The collateral structure in futures products has also markedly improved since the market bubble of 2021, where 100x leverage using volatile crypto-collateral as margin was commonplace. Over the last few years, Stablecoins and USD have become the preferred margin collateral, commanding 81.6% dominance.

This has led to a vast reduction in excessive volatility and attenuated the severity of liquidation cascades, as the value of margin collateral remains stable. This can be viewed as another step towards maturation of the asset class, and a strict improvement in market structure.

Bitcoin: Percent Cash-Margined Open Interest

Data Source: Glassnode



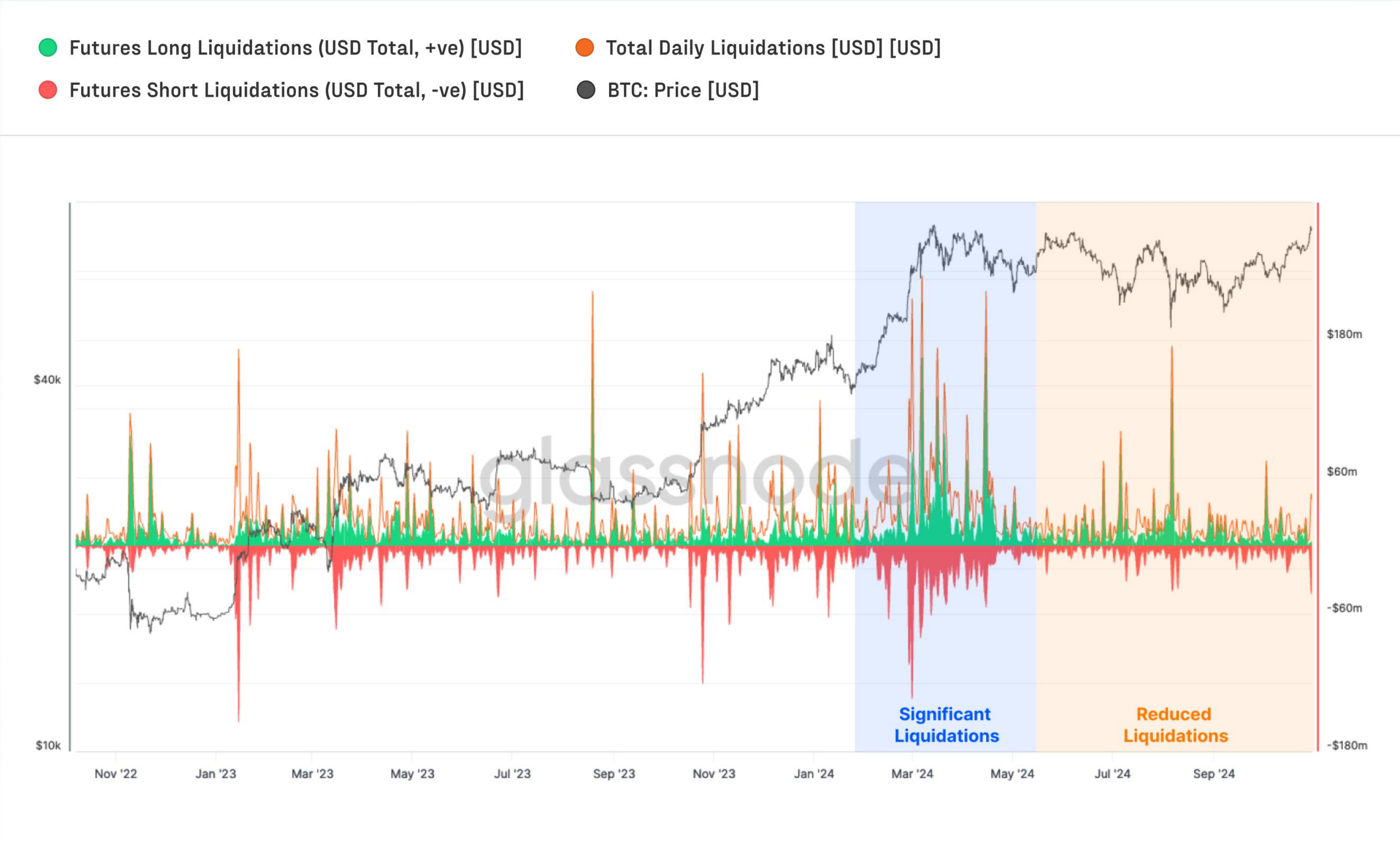
Total Liquidations

The rally which followed the launch of the Bitcoin ETFs in H1 2024 attracted a large number of directional speculators and an increase in overall leverage. As a result, we saw significant spikes in the volume of liquidated margin accounts for both long and short positions, especially after the March peak was established.

Over the past six months, the volume of liquidations has declined meaningfully, except for the flash crash triggered by the yen-carry-trade unwind on 5 August. This trend suggests a shift towards a net reduction in leverage and reduced speculation, making for a healthier market environment.

Bitcoin: Total Futures Liquidations

Data Source: Glassnode



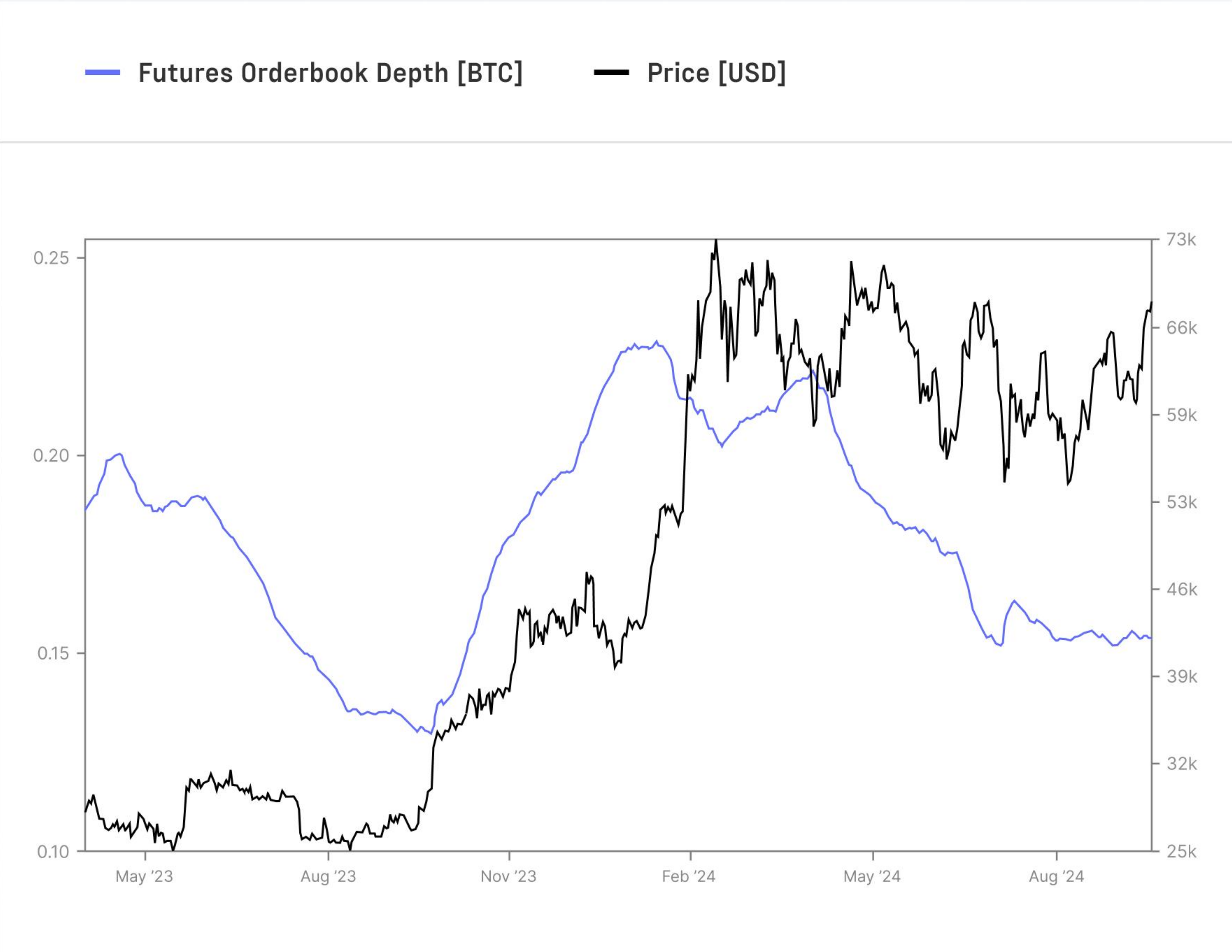
Orderbook Depth

The chart displays the bid-ask spread for a $100k USD order on the Bitcoin Perpetual swap denominated in USDT on Binance, arguably the most liquid derivative book in crypto. The left-hand side shows the spread in basis points (0.01%), and on the right-hand side and superimposed, the price of Bitcoin.

The relatively tighter spreads compared to Binance Spot indicate that perpetual futures are generally more liquid than spot instruments. The stable spread levels from August onward suggest a maturing or stabilising trend in the futures market liquidity.

Binance Futures Market Depth vs Price

Data Source: Fasanara Digital



"Over the past few years—and especially in the last year—we have witnessed significant maturation in the infrastructure of digital asset venues and the market as a whole. Liquidity has deepened, the market size has expanded, commissions have declined, matching engine performance has improved, portfolio margining has enhanced collateral efficiency, and exchanges have become much more institutionalized."

Nikita Fadeev

Partner - Fasanara Digital

Lending and Borrowing Rates

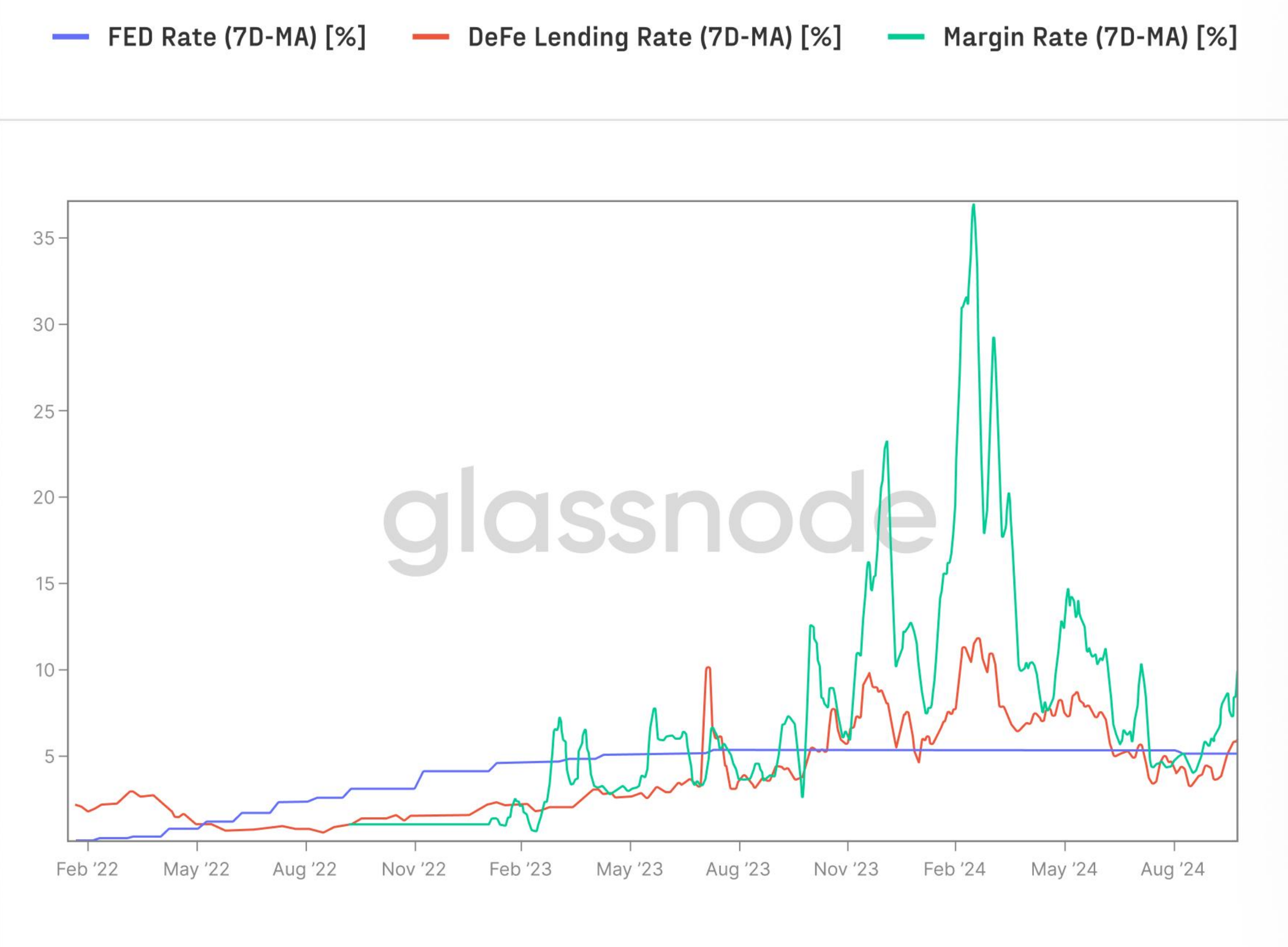
This chart illustrates borrowing rates for dollars across three categories. The average DeFi rate, margin rate on exchanges and the Federal Funds (FED) rate. From late 2022 to late 2023 borrowing rates in DeFi and margin rates have shown correlation with the FED fund rates until idiosyncratic crypto demand drove rates even higher. The margin rate diverged significantly spiking to over 35% in April of 2024, reflecting the heightened speculative demand and risk premia driven by volatile crypto market conditions after Bitcoin made a push to all-time highs in March.

The stabilisation in the markets post all-time high shows rates reverting towards the Fed Funds benchmark. However, towards Q4 of this year there has once again been a noticeable uptick in rates reflecting a resurgence in speculative appetites.

Across this period margin rates have remained significantly higher than DeFi rates diverging especially during periods of high volatility, DeFi is typically less sensitive on the supply side due to idle capital being deployed to earn yield.

Lending Market Rates Comparison

Data Source: DeFi Llama and Morpho



"CeFi demand has picked up considerably since the summer, with demand from market makers, hedge funds, and miners having more than doubled in that time. Borrowing rates, which had largely been tied to the basis trade on exchange have risen accordingly."

John Glover
Chief Investment Officer at Ledn

Size of the Market

This chart illustrates the size of the crypto lending market in terms of the total TVL in DeFi due to the greater availability of data, we estimate that the CeFi lending market is of similar magnitude including both margin trading and OTC providers.

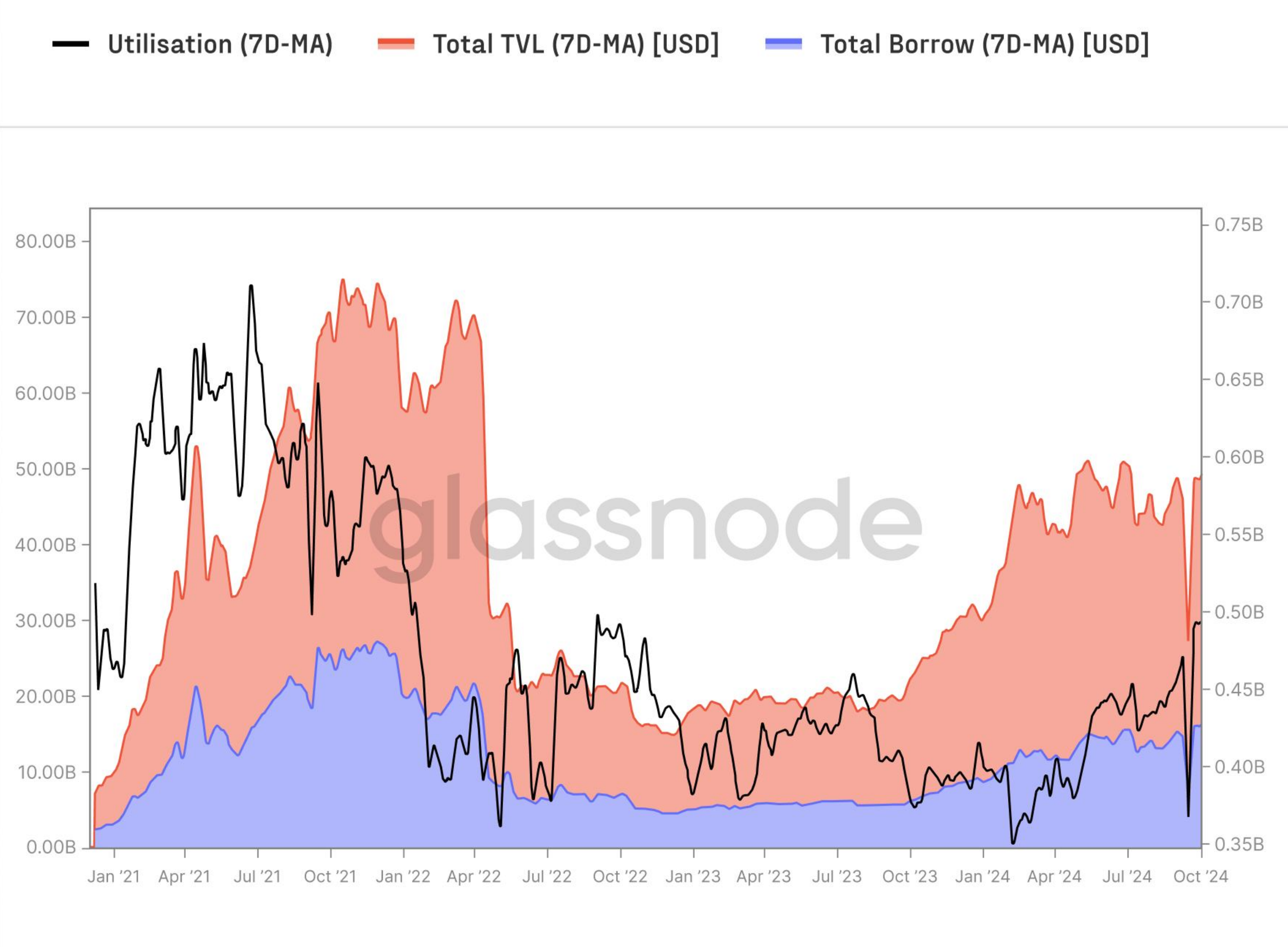
Utilisation is the fraction of total assets deposited in lending protocols that are being borrowed, being an indicator for leverage appetite natively in DeFi.

Low LTV DeFi loans are generally split into two categories: Stablecoin loans represents approximately 1/3 of the demand, and ETH and other token loans, used for leveraging up yield generation opportunities, the remaining two thirds.

Since March, TVL has remained steady, yet utilisation has crept upwards, showing increasing demands for loans, initially due to re-staking opportunities, and eventually followed by an increase in stablecoin borrowing as rates normalised.

Size of the Market

Data Source: DeFi Llama



"Risk management has become far more professionalised in the CeFi lending market, which has pushed some demand to the DeFi markets. However, larger institutional borrowers looking for loans of $20-100 million, are unable to find that liquidity in DeFi."

John Glover
Chief Investment Officer at Ledn

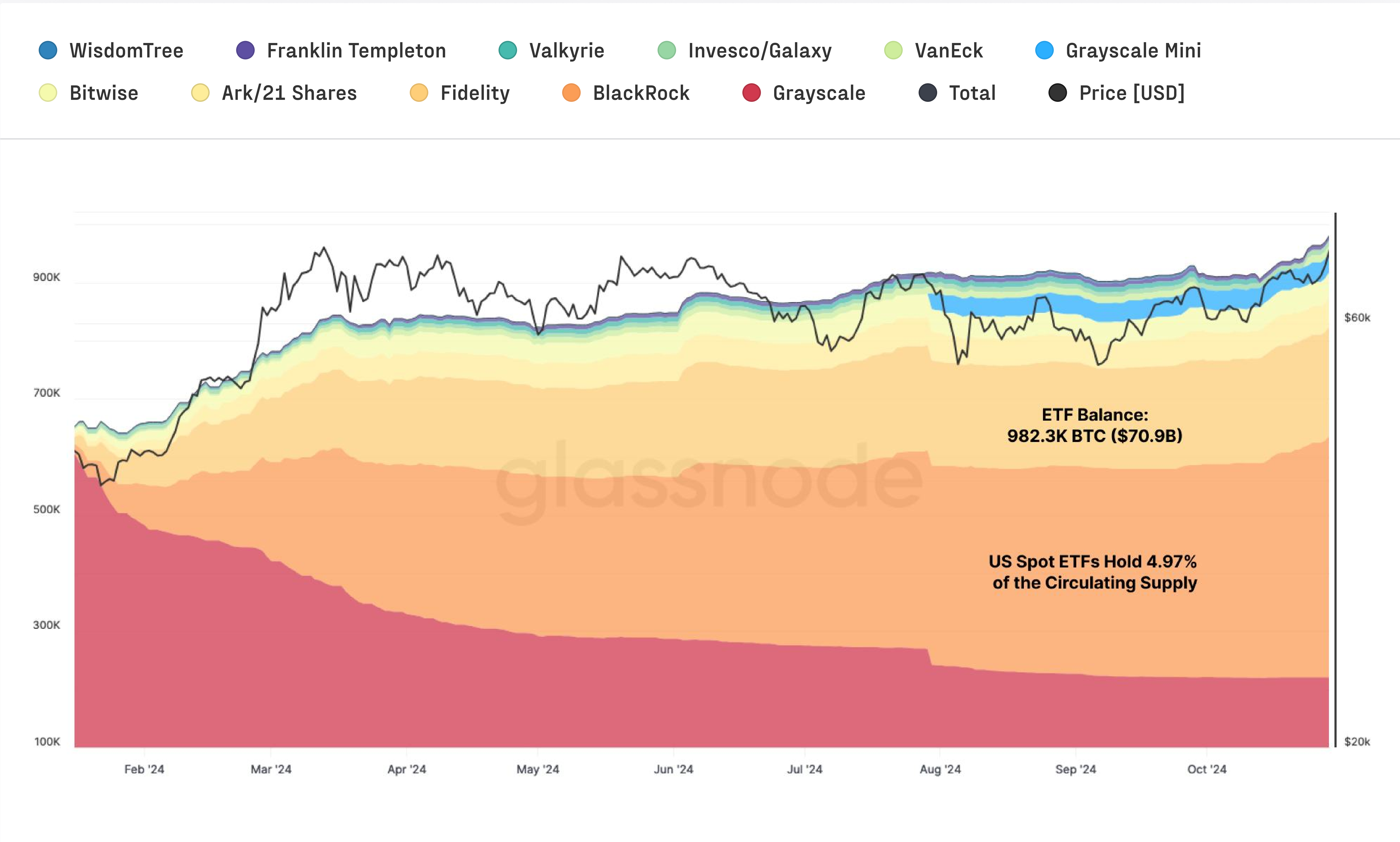
US ETFs AUM

On January 10th 2024, the first US spot Bitcoin ETFs were approved, marking a historical event for the digital asset landscape. These ETFs provide institutional investors access to regulated spot exposure for the leading digital currency, and simplify the process for investors with existing brokerage accounts.

The institutional appetite for Bitcoin exposure has been phenomenal, with the total assets under management across all ETF instruments now at a market value of $70.9B, holding around 4.97% of the circulating Bitcoin supply.

Bitcoin: US Spot ETF Balances [BTC]

Data Source: Glassnode



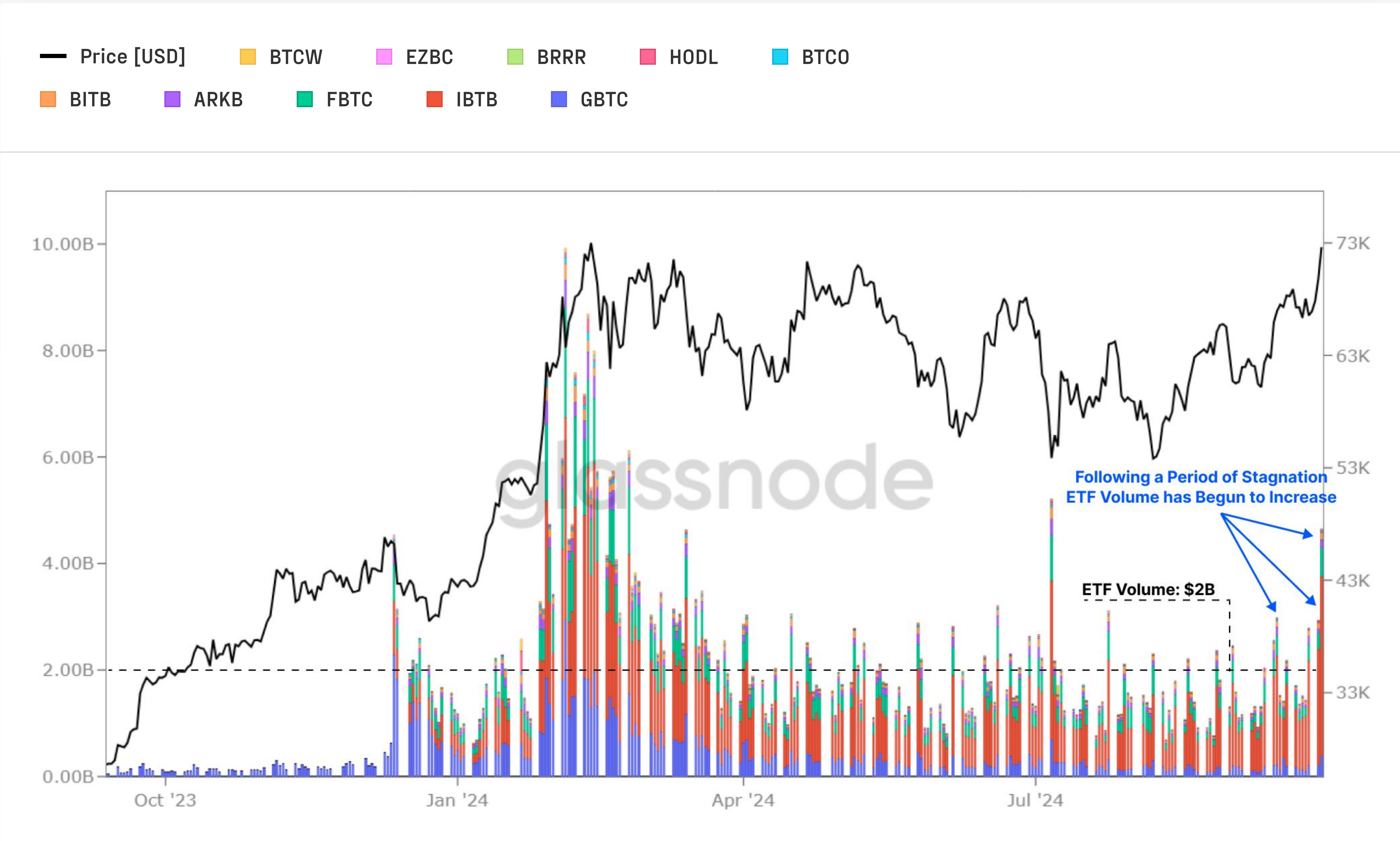
US ETFs Volume

The trading volume of Bitcoin ETFs in the US has decreased since the surge into the market ATH, with the decline reflecting the choppy sideways price action.

Despite reduced trading activity over the past two months, ETF volumes have consistently remained between $1B and $2B per day. Recently, however, volumes have ticked higher, breaking above $5B following a price breakout above the $70,000 price level.

Bitcoin: ETF index Price & Volume

Data Source: Checkonchain



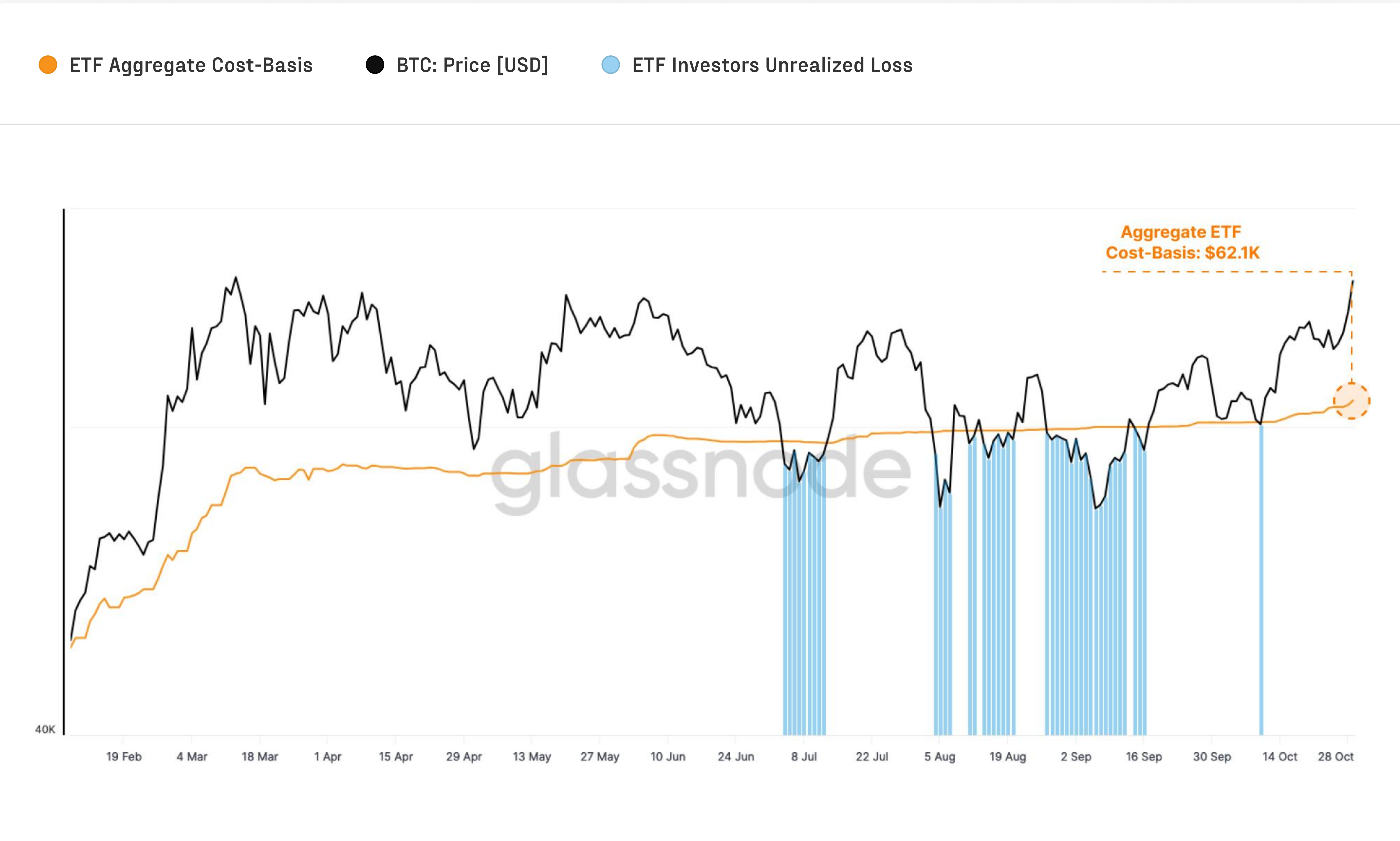
US ETF Investor Cost-Basis

We can utilize the price-stamping of Bitcoin deposits into ETFs to estimate the average acquisition cost basis. This cost-basis model can help approximate a break-even point for ETF investors, serving as a gauge for psychological stress based on their unrealized profit or loss.

Notably, the spot price has tested these ETF break-even levels on three critical occasions since July and has provided robust support. Additionally, the lack of sustained outflows when these levels were tested gives insight into the profile of ETF holders, who are relatively resilient and perhaps long-term-oriented investors with high conviction.

Bitcoin: US Spot ETF Deposit Cost Basis

Data Source: Glassnode



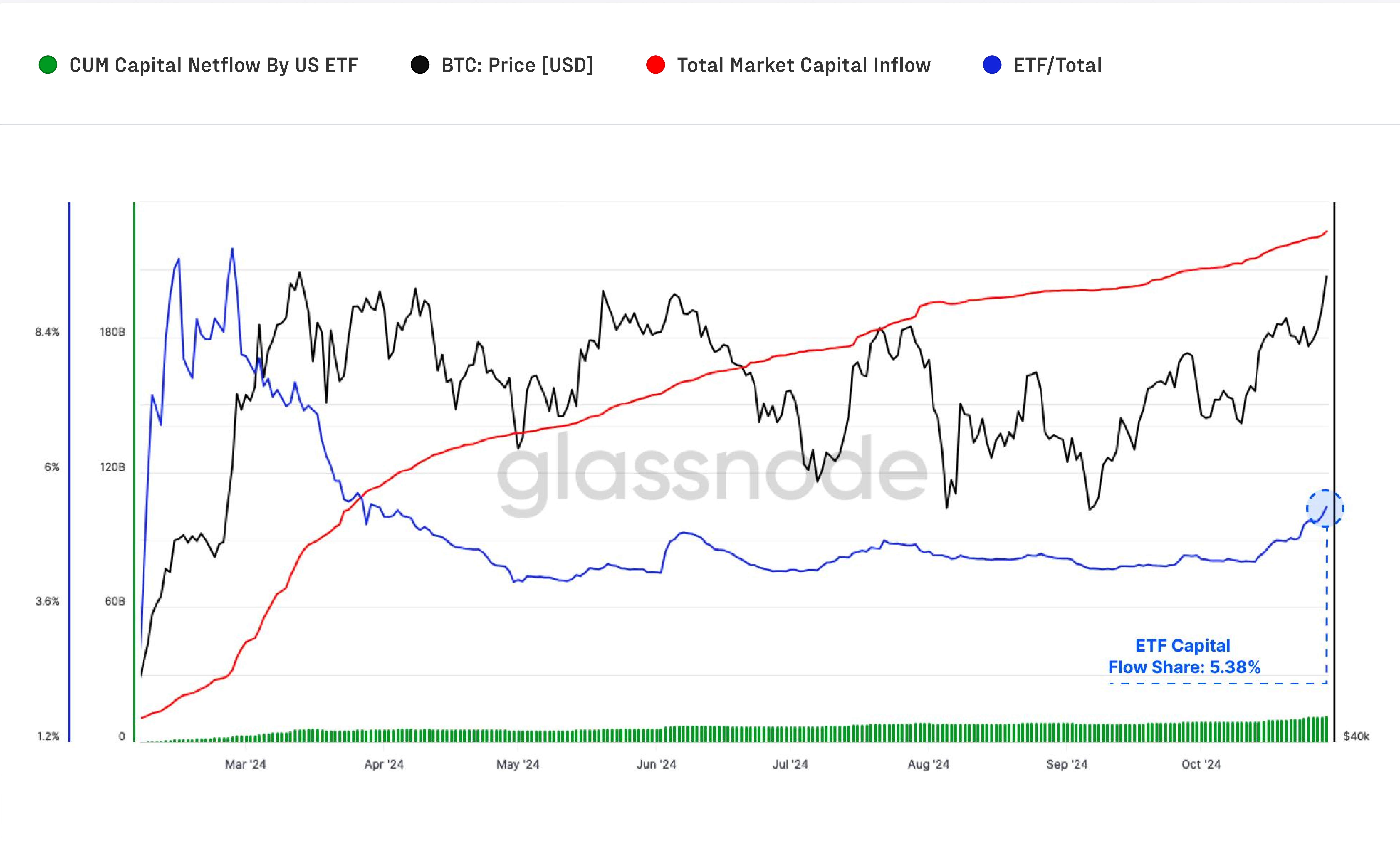
Effects of US ETF Market Structure

By comparing the amount invested in ETFs against the net capital flow into Bitcoin asset, we can assess the proportion of capital inflows associated with ETF demand.

Since the start of the year, approximately 4% to 5% of the total net capital inflow into the Bitcoin market can be associated with coins flowing into the spot ETFs. This result aligns with their share of the total supply held, providing a reasonable baseline for evaluating their influence on the market.

Bitcoin: ETF Capital Inflow

Data Source: Glassnode



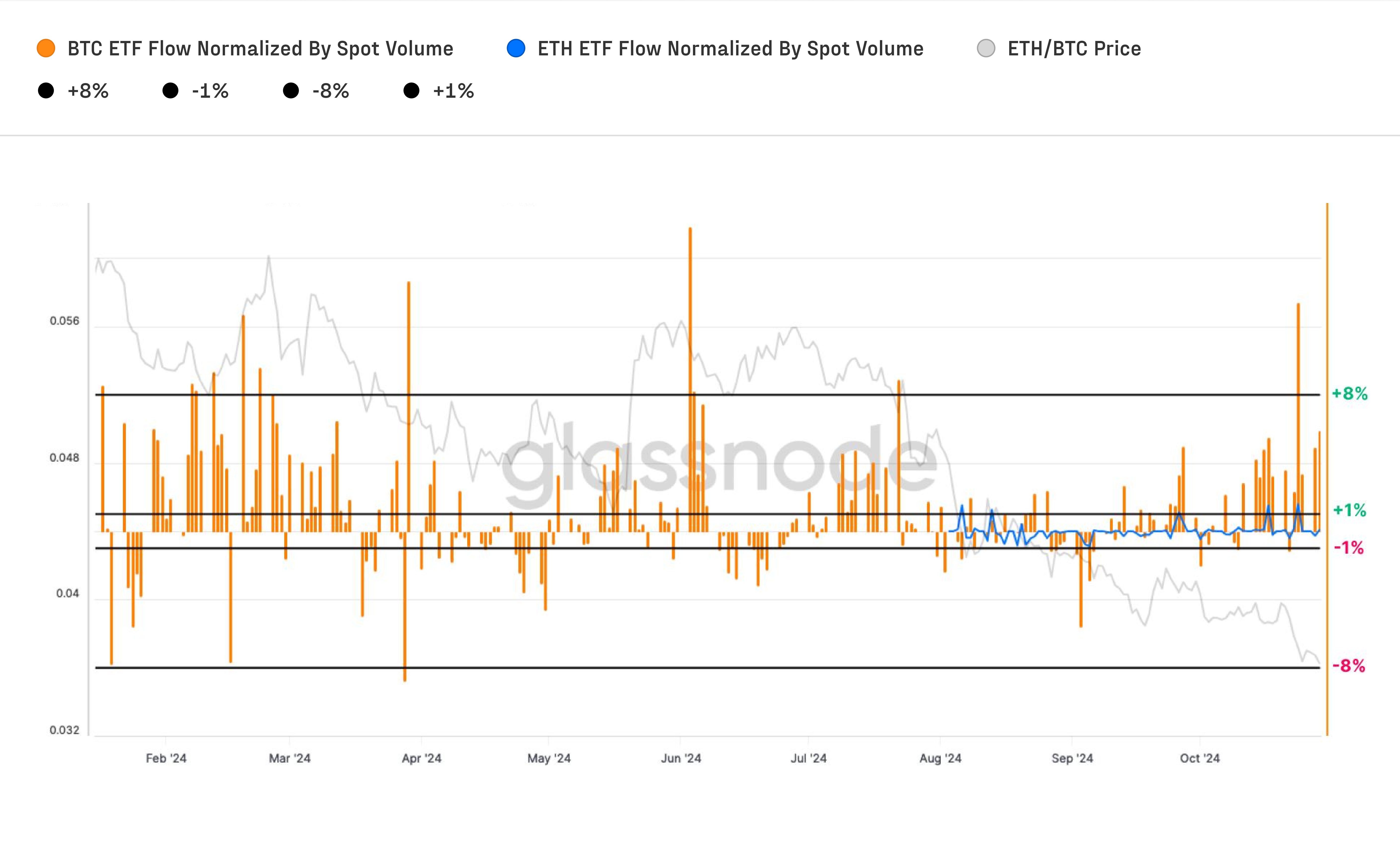
BTC vs ETH Comparison

To compare the impact of the ETFs on the Bitcoin and Ethereum markets, we have normalized the ETF netflow volume by their corresponding Spot Volumes, allowing for a direct comparison of the relative weight of both ETFs.

The relative influence of ETFs on the Ethereum market is equivalent to a range of ±1% of the spot volume, compared to ±8% for the Bitcoin ETF. This suggests the appetite for the Bitcoin ETFs is nearly an order of magnitude larger than its Ethereum counterpart, underscoring a greater institutional demand for Bitcoin overall.

ETF Market: BTC & ETH ETF Impact Comparison

Data Source: Glassnode



Active Entities and Total Entities

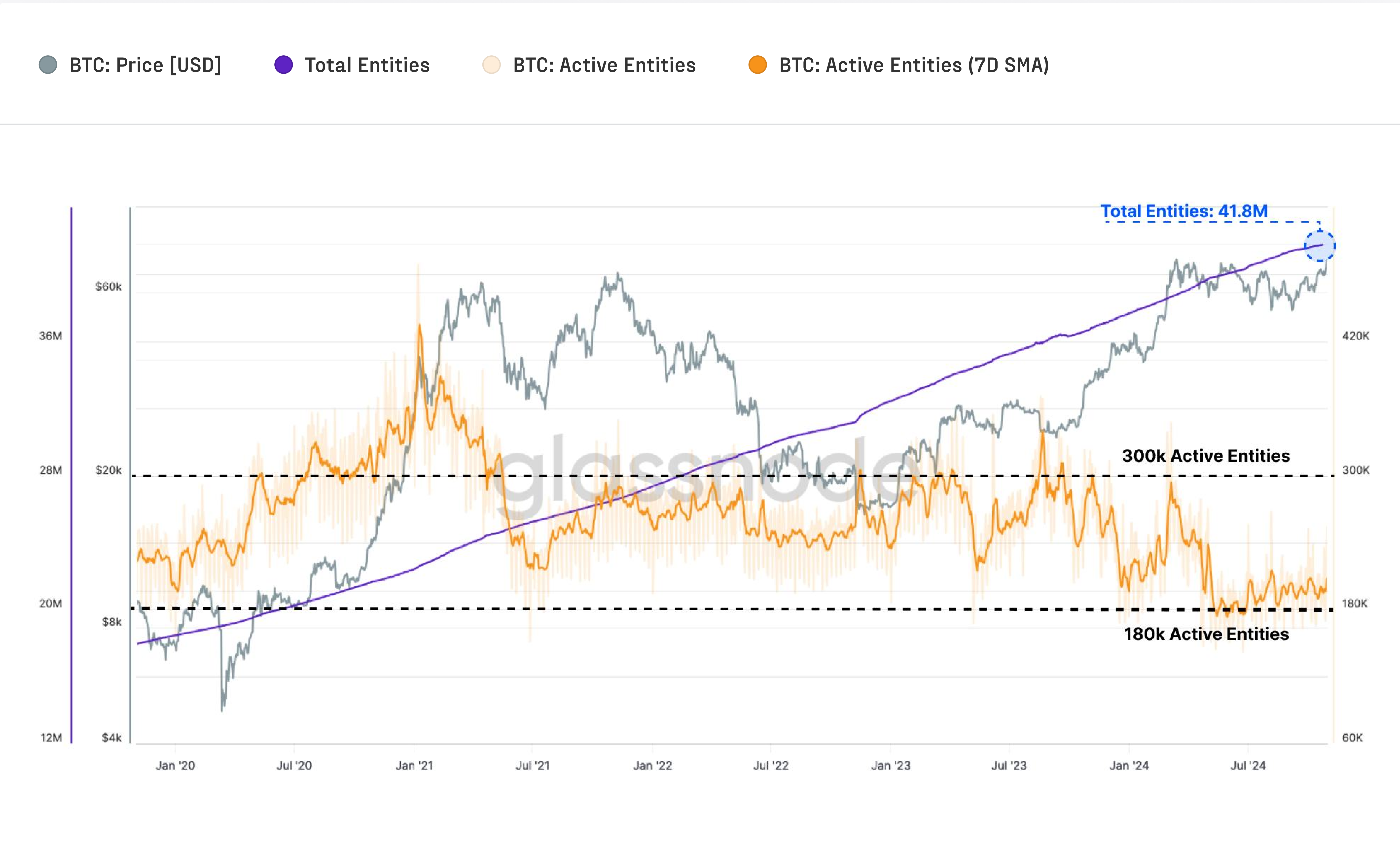
One way to assess trends in network adoption for Bitcoin is through the Active Entities metric. This tool offers insight into a 'daily active user' count by evaluating the number of unique entities transacting on the network daily. Typically, the Active Entities metric shows sustained growth during strong market uptrends and sharp spikes during periods of capitulation.

This metric is a modified version of the well-known Active Addresses and utilizes Glassnode's proprietary clustering algorithm to combine multiple addresses likely owned by a single entity.

Over the last 6 months, approximately 180k to 300k unique entities have been transacting on the Bitcoin network each day, and a staggering 41.8M unique entities in total have interacted with the Bitcoin network during its 15+ year existence.

Bitcoin: Active Entities

Data Source: Glassnode



Settlement Volume Comparison

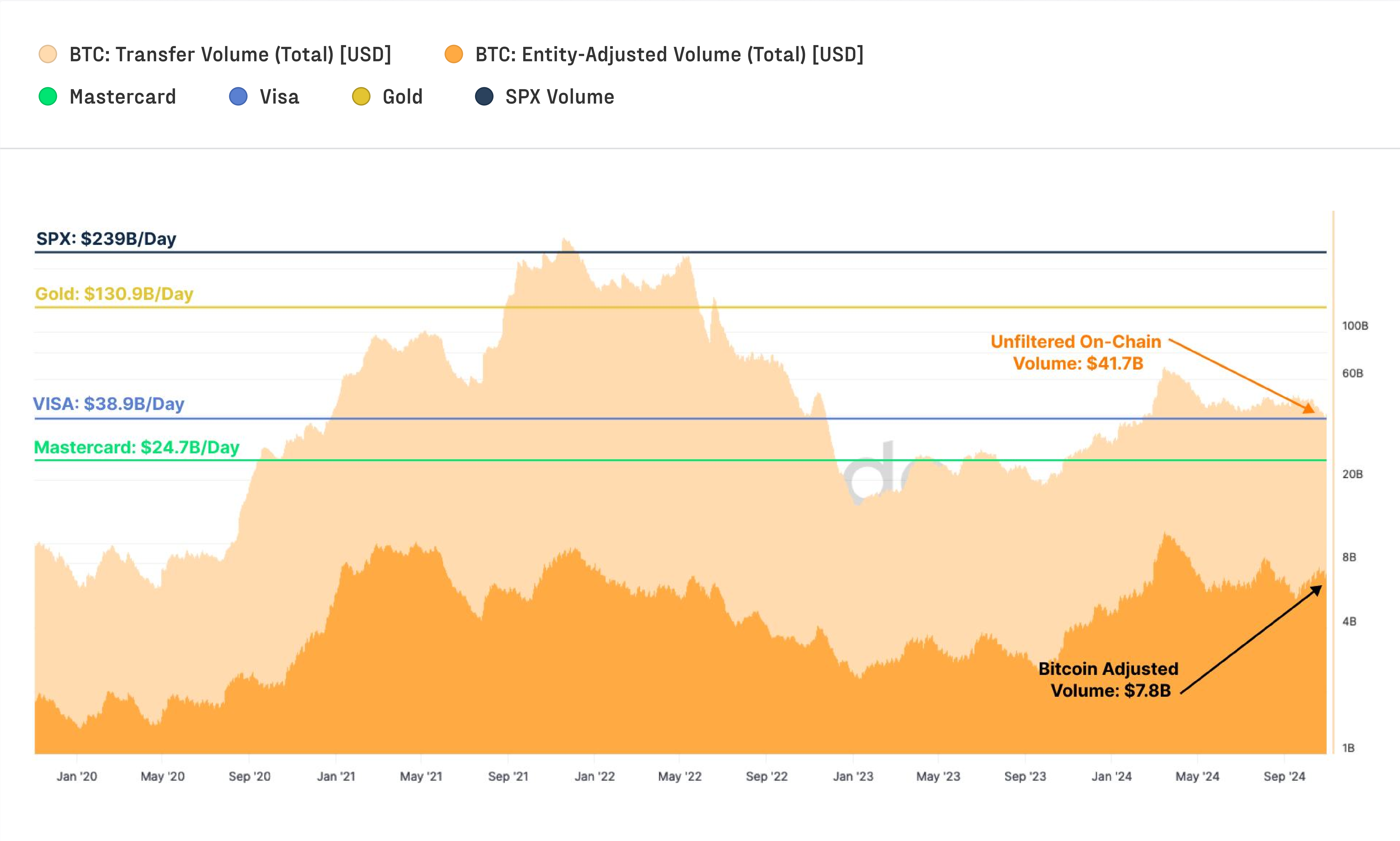
One of the significant value propositions of the Bitcoin network is its ability to settle value across a decentralized peer-to-peer network, without the need for trusted intermediaries like banks and payment processors.

On an unfiltered basis, Bitcoin currently sees around $41.7 billion daily on-chain volume, similar to traditional payment processors like Visa and Mastercard.

Glassnode pioneered applying advanced filtering heuristics, which assess whether on-chain transaction volumes are economical in nature or internal transactions for wallet management by exchanges like Coinbase and Binance. Once this filtering is applied, the economic transfer volumes are closer to $7.8 billion daily, similar to the daily spot trade volume.

Bitcoin: Settlement Volume Comparison

Data Source: Glassnode



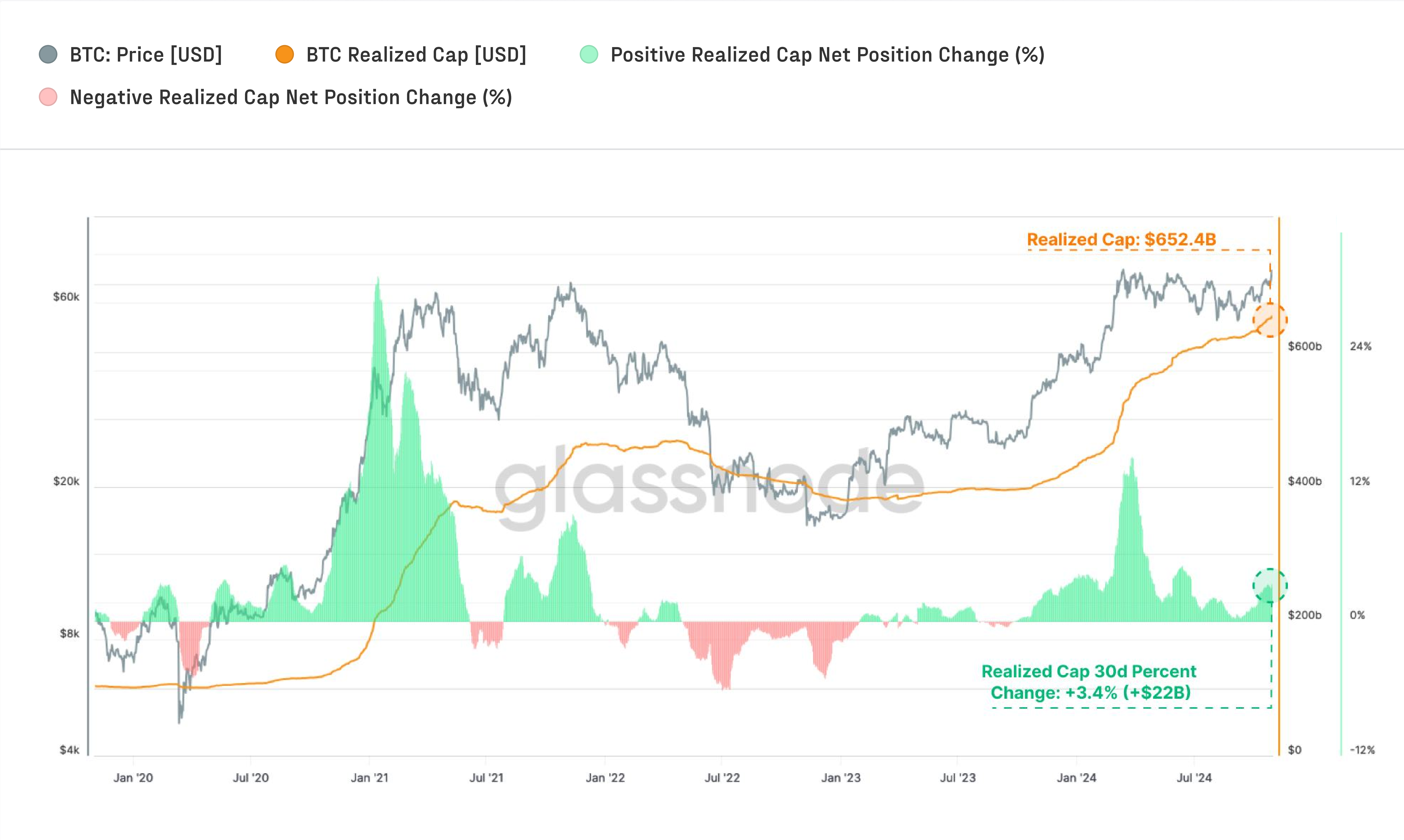
Realized Cap

The Realized Cap is a foundational metric that provides a measure of the cumulative capital netflow into and out of the Bitcoin network. It is similar to the market cap, except it values each coin at the price when it last transacted on-chain rather than the last traded price.

Net capital inflows into the Bitcoin asset have accelerated throughout 2023-24, increasing by $22B (+3.4%) over the last 30 days. This has resulted in the Realized Cap ticking up to a new ATH, reaching over $652.4B. This infers that liquidity and wealth stored in Bitcoin is growing, with meaningful capital inflow supporting the price increase.

Bitcoin: Realized Cap Net Position Change

Data Source: Glassnode



Tokenization

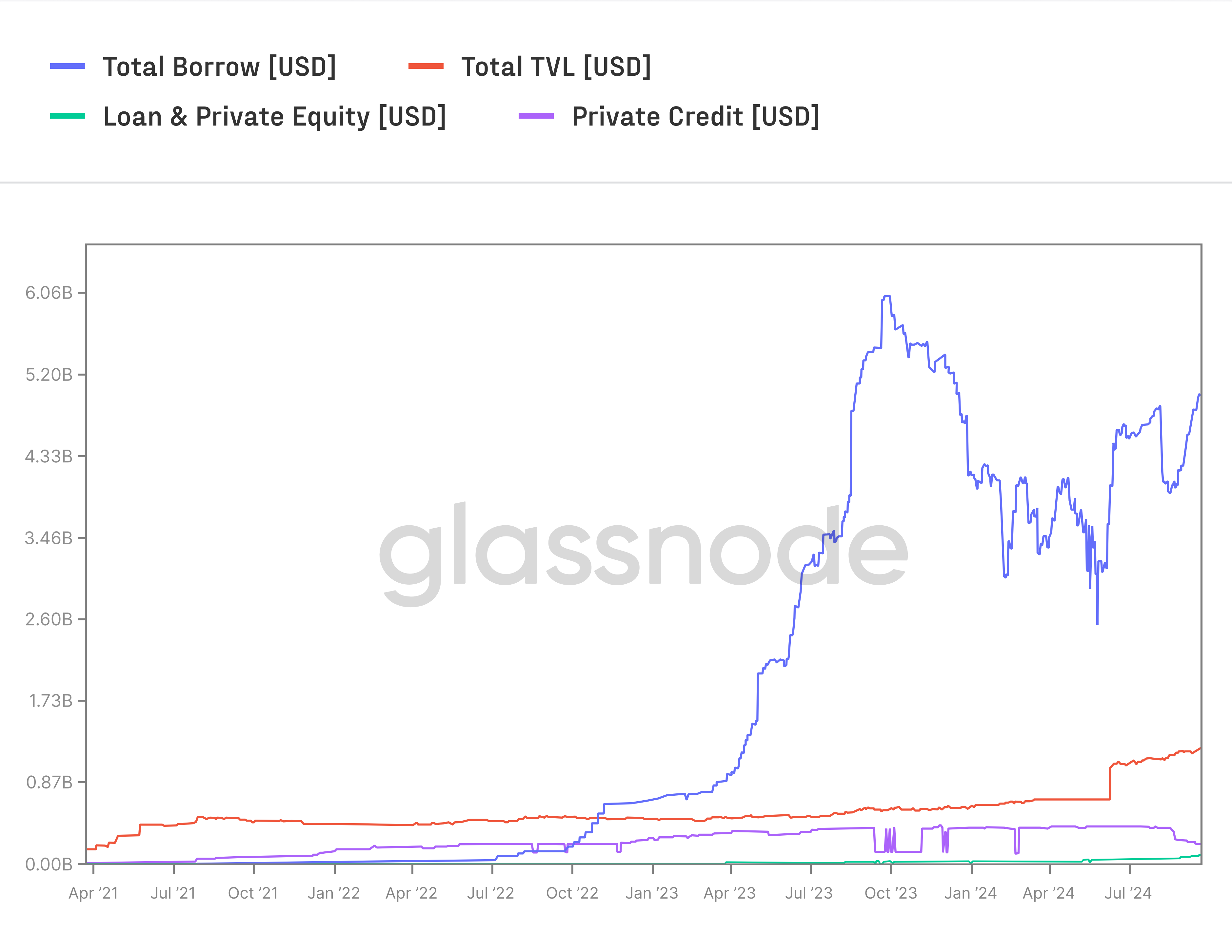
One of the most important trends of the last cycle has been the tokenisation of real-world assets (RWA), with these tokens being composed into many DeFi verticals such as sources of collateral and using treasuries as the backing for yielding stablecoins.

Centralised exchanges have also begun accepting tokenised gold, treasuries and other securities as collateral on their platform. The size of the industry continues to grow, with the total on-chain tokenised value reaching an all-time high at present.

Currently, the largest portion of these tokenised assets is held by crypto-native protocols such as Maker DAO where this is used as collateral for the DAI stablecoin. More recently, traditional asset managers such as Blackrock and Franklin Templeton have ventured into the tokenised treasuries space and, between them, have tokenised $900m of treasuries since July of this year. They are first movers, and unlikely to be the last. So far, Treasuries have been dominant in their share of tokenised assets due to their simplicity. More nuanced products have seen slow increases in TVL such as tokenised credit.

Tokenization Market Breakdown

Data Source: DeFi Llama



"Embracing tokenization is central to our vision at Fasanara. We are devoted to promoting its adoption because we recognize its profound value proposition: enhancing efficiency, boosting transparency, lowering end-user costs, and enabling composability across platforms. We firmly believe that tokenization will play a pivotal role in shaping the future of the financial industry."

Francesco Filia
Founder and CEO, Fasanara Capital

VC Funding

Data sourced from DeFi Llama Since August 2023, VC investment in the crypto sector has reached a notable low, contrasting with the recent upward trend in Bitcoin's price. Despite Bitcoin's price increase, private market funding hasn't mirrored this growth, suggesting a significant shift in market sentiment from when bitcoin was previously at this price.

In 2021, Bitcoin's price was surging, having doubled from its previous all-time high, driving optimism and investment across the board. Today, while Bitcoin has reclaimed levels comparable to those seen during its peak in 2021, investor sentiment appears

Additionally in 2021 we saw illiquid private investments' valuations acting as beta to crypto prices and massively swelling to the upside. The more recent divergence between Bitcoin's price performance and VC funding suggests that while institutional and retail interest in Bitcoin remains strong, VC investments have been better priced for their illiquidity and there is greater appreciation for the swings seen in crypto market cycles.

Total VC Deals

Data Source: DeFi Llama

Bitcoin Listed Company Balance Sheets

The current largest holders of Bitcoin are Microstrategy, and crypto native companies such as miners Marathon and Riot and exchanges such as Coinbase. Other early adopters such as Tesla, Aker (an energy services company) and Boyaa (an online gaming company) have significant Bitcoin holdings.

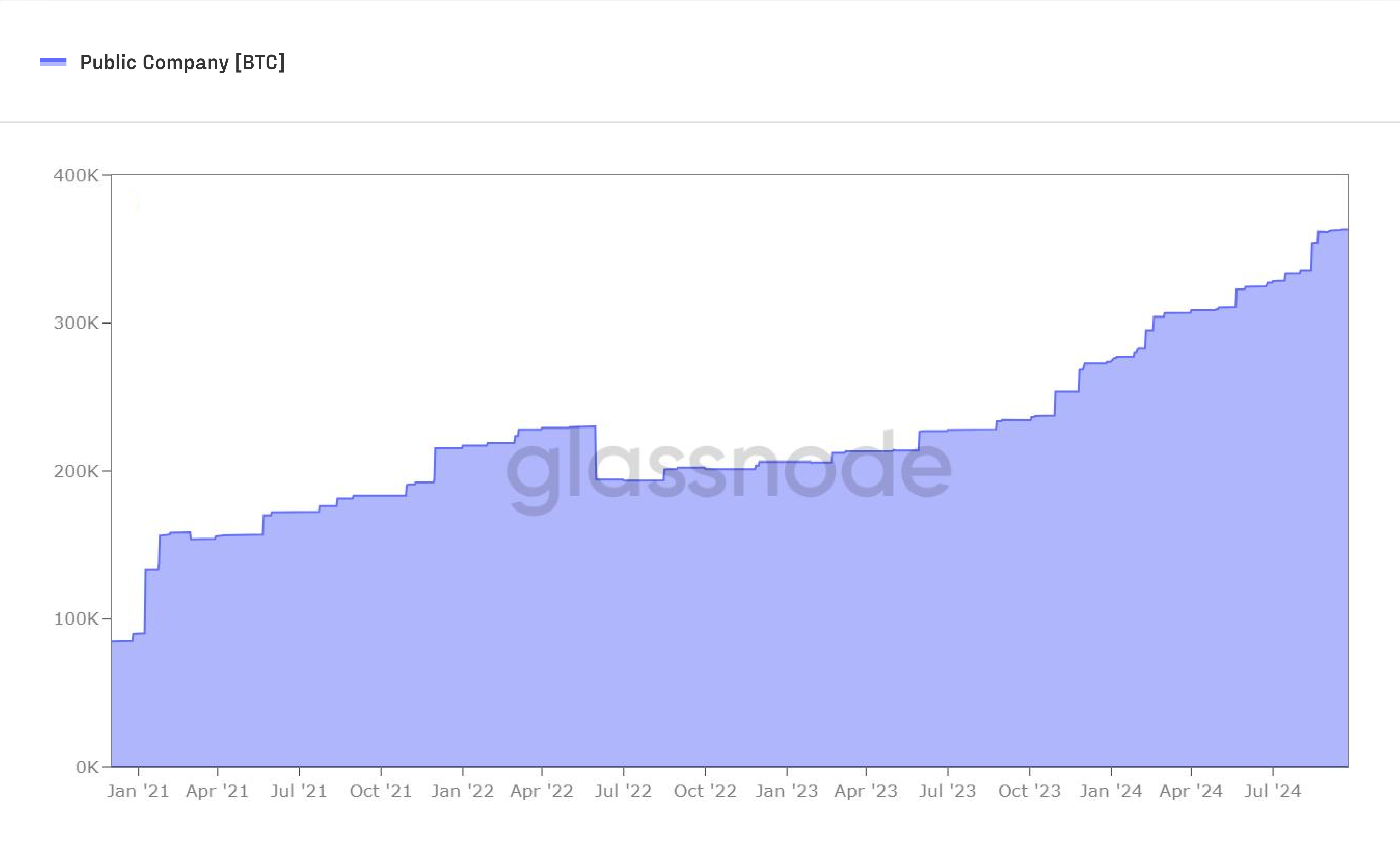
MicroStrategy's accumulation of 252,220 BTC since its initial investment in 2020, has been a move that has significantly influenced both its balance sheet and stock valuation as well as becoming a benchmark for corporate bitcoin investments.

Cumulatively public companies now hold ~1.8% of current Bitcoin supply, and with companies such as Microsoft voting on Bitcoin purchases for its corporate treasury, the trend seems to be on the rise.

These trends underscore a shift in corporate treasury strategy where Bitcoin's value as an alternative asset class is starting to be recognised.

Bitcoin Companies Holdings

Data Source: bitcointreasuries.net



Off Exchange Settlement Solutions

Since the collapse of FTX, the market awareness towards counterparty risk has grown substantially, finally pushing the largest exchanges to offer off-exchange settlement solutions with various providers, allowing institutions to trade on their venues without the exchanges taking direct custody of the trading collateral.

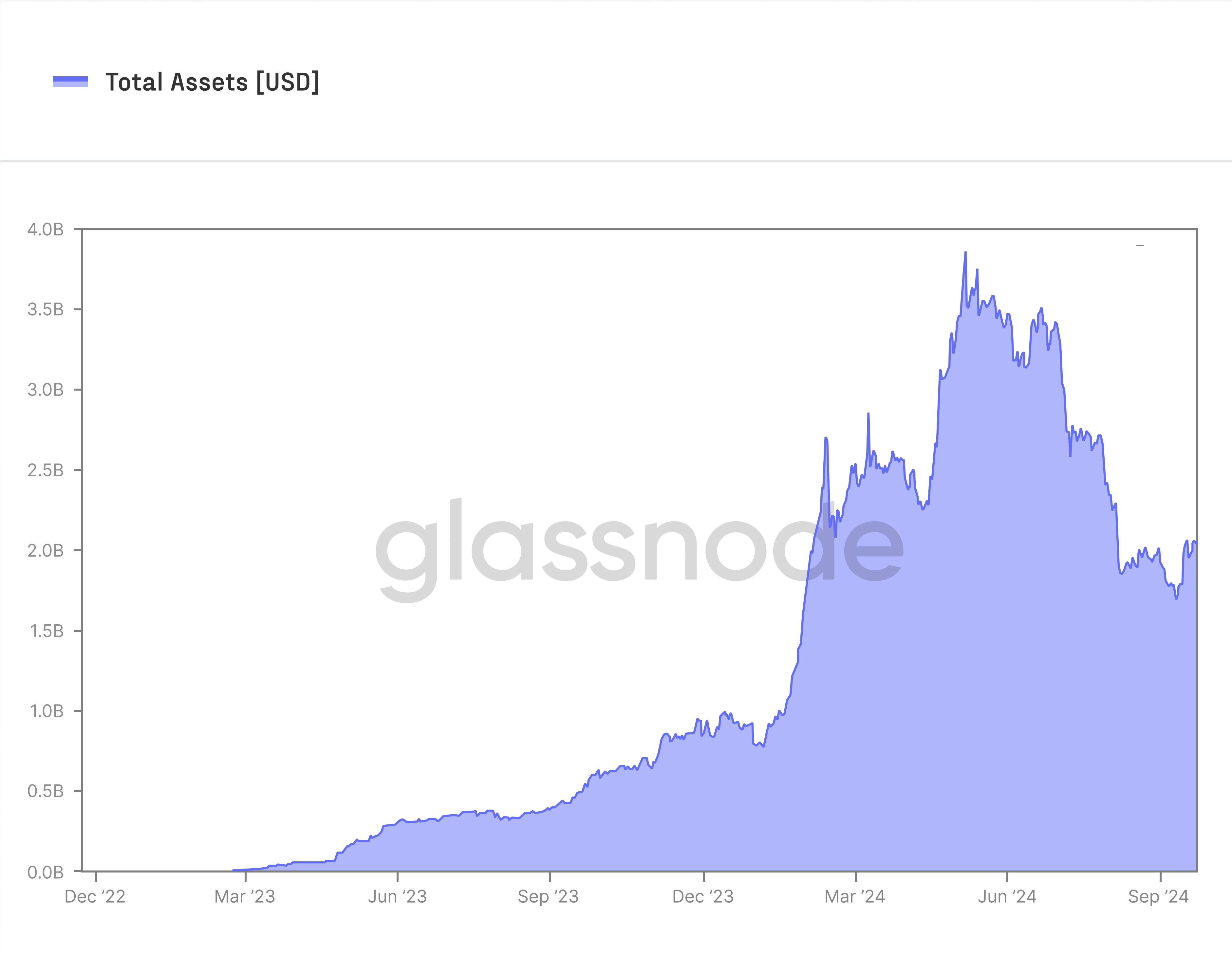
In the chart above, we show the impressive growth of assets in the latest version of the Copper ClearLoop system, the most well-known and widely used solution of this type.

The trend is clear, and despite being influenced by crypto prices, and shifting allocations from institutions, more than 1bn per year is being deployed on centralised exchanges via these solutions.

Allowing institutions to deploy capital avoiding counterparty risk allows new market participants to enter the space, and new exchanges to facilitate high liquidity trading without trust assumptions.

Total Clearloop Assets on Ethereum and Bitcoin

Data Source: Copper



"We are thrilled to see the rapid adoption of ClearLoop, which stands as a testament to our commitment to driving innovation within the industry. The success of ClearLoop highlights the increasing demand for transparent and efficient solutions that not only meet but exceed our clients' expectations. We remain dedicated to continuously enhancing our offerings and collaborating closely with our exchange partners to deliver products that align with client demand."

Adam Groom
Copper

Key Pricing Levels

Utilizing key on-chain pricing levels, we are able to construct a framework for thinking about Bitcoin market cycles. This can be considered under the following framework:

Deep Bear Market:
Prices Trade Below The Realized Price.

Early Bull Market:
Prices Trade Between Realized Price And True Market Mean.

Enthusiastic Bull Market:
Prices Trade Between The ATH And True Market Mean.

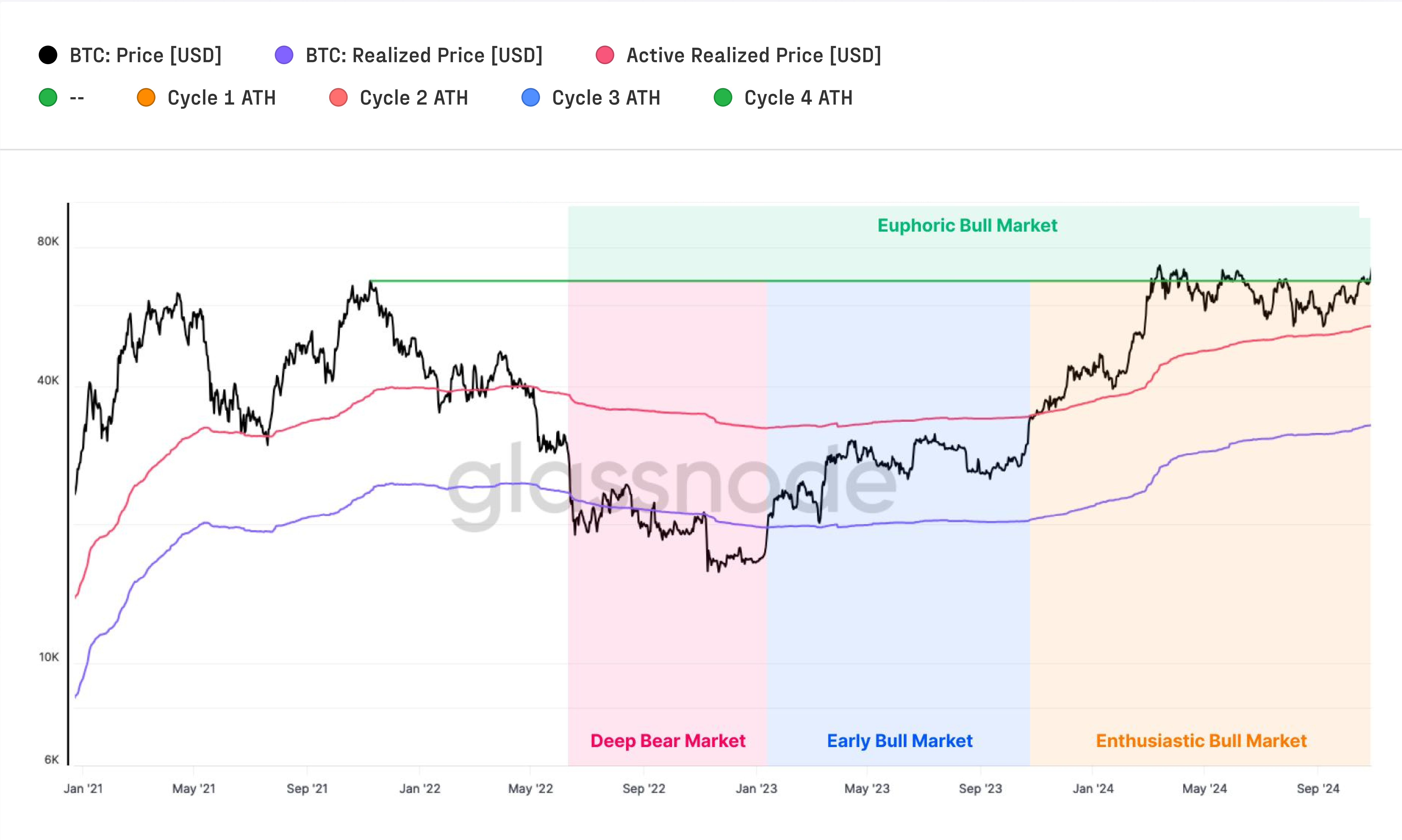
Euphoric Bull Market:
Prices Trade Above The Previous Cycles' ATH.

The spot price is attempting to transition from the Enthusiastic Bull Market regime into the Euphoric Bull Market, distinguished by a sustained break above the 2021 ATH of $69k.

This level was briefly breached during the March 2024 peak, however profit taking was too heavy at the time, necessitating a period to cool off investor excitement.

Bitcoin: Key Pricing Levels

Data Source: Glassnode



Annualized Volatility

Realized Volatility has been declining cycle upon cycle as the size of the asset continues to rise meteorically, requiring an increasing amount of capital to move the market. This suggests the maturation of the asset class with growing capital flows, investor adoption, and an expanding institutional holder base.

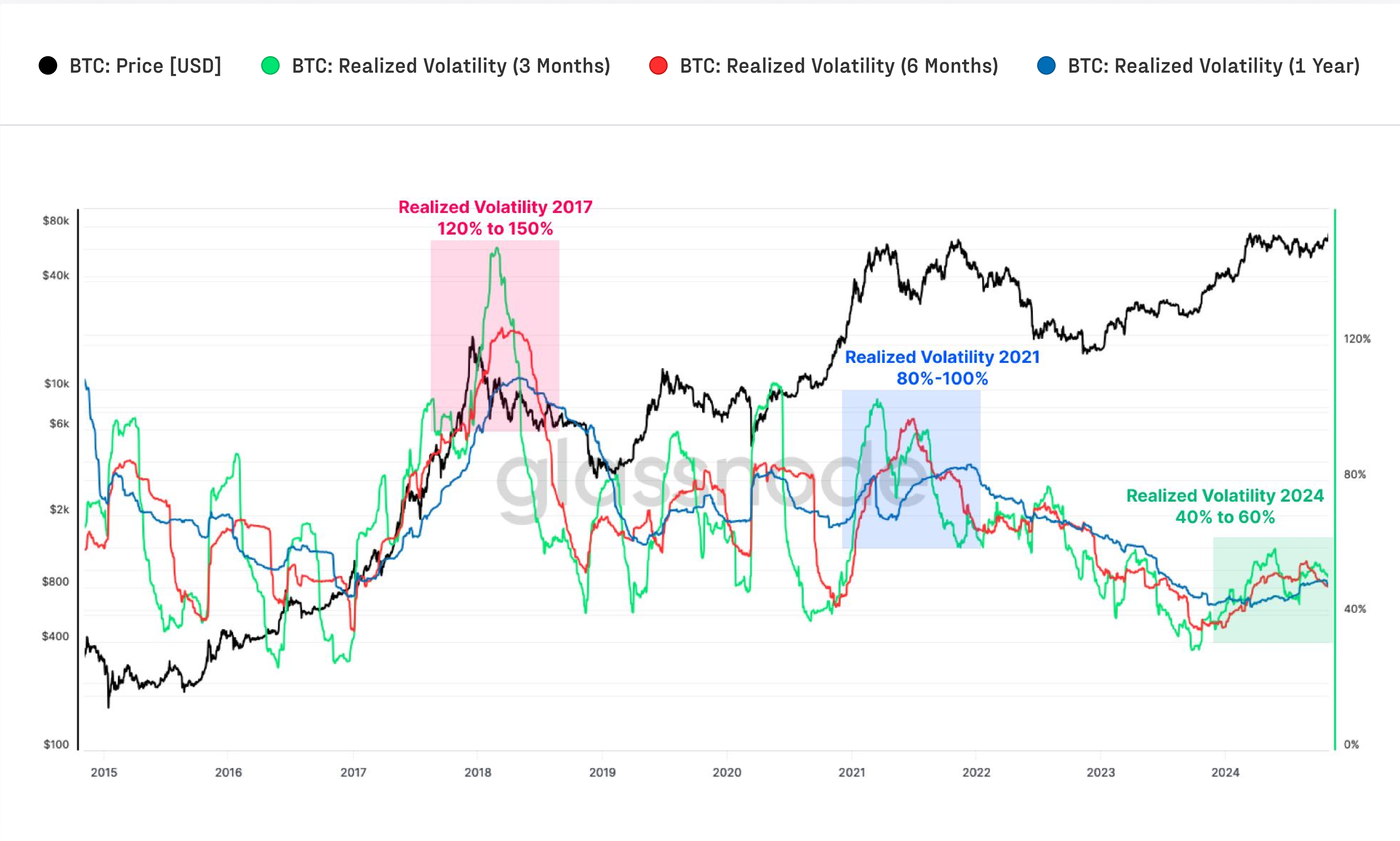
- 2017 Bull Market: 120%-150%
- 2021 Bull Market: 80%-100%
- 2024 Bull Market: 40%-60%

Realized Volatility has remained relatively subdued, even when accounting for the diminishing returns across cycles.

This alludes to the potential for heightened volatility expectations across the cycle, as Bitcoin volatility tends to increase during bull markets.

Bitcoin: Annualized Realized Volatility

Data Source: Glassnode



Realized Cap HODL Waves

The Realized Cap HODL Waves is a powerful metric that assesses the composition of network wealth held by investor age. By segregating coins aged less than three months, we can construct a proxy to assess “new investor” wealth in the market.

Historically, cycle-topping events are punctuated with the saturation of retail investor wealth.

This phenomenon occurs across all marketplaces, old and new, with tenured investors heavily distributing supply to new investors who are allured by the explosive price action.

The percentage of wealth held by new investors did not reach the elevated limits experienced during previous ATH distribution events, suggesting that this cycle has likely not concluded.

Bitcoin: Realized Cap HODL Waves

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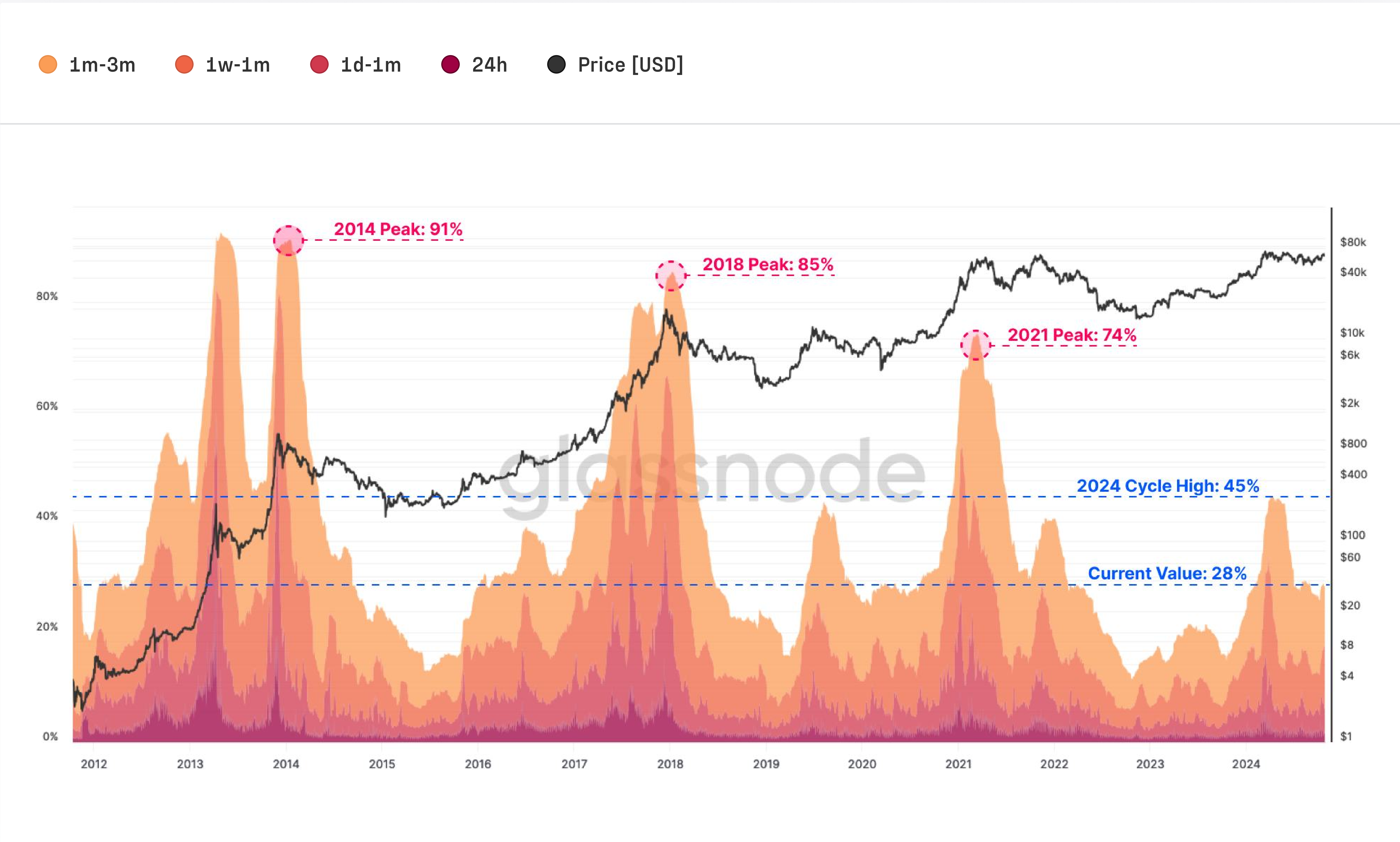

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