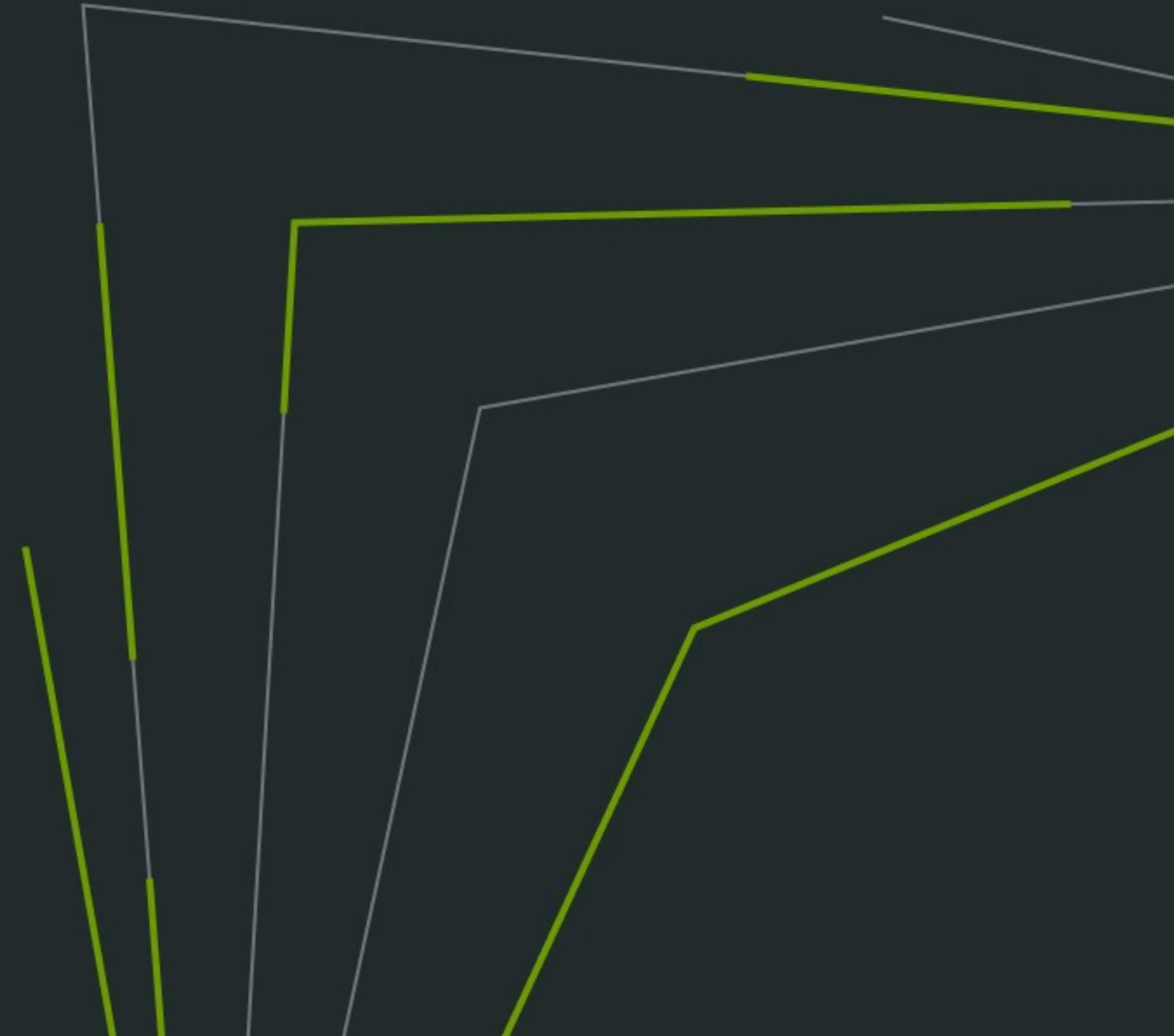


NOVEMBER 2023

# Research Roundup

Chris Kuiper, CFA – Director of Research, Fidelity Digital Assets<sup>SM</sup>

Matt Hogan – Research Analyst, Fidelity Digital Assets<sup>SM</sup>



# Research Roundup – November 2023

01. Recent Market Action

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02. Making the Headlines This Month

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03. Where We are at in the Bitcoin Cycle

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04. What is Going on with Bitcoin Fees?

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05. In Case You Missed It – Recent Research Reports



The background features a dark grey color with abstract geometric patterns. On the right side, there are several overlapping circles and arcs in a vibrant orange color. On the left side, there are several thin, light grey concentric circles and arcs. The overall aesthetic is modern and technical.

# Recent Market Action

# Bitcoin and Ether Best Performing Assets YTD

## YTD Bitcoin and Ether Returns Compared



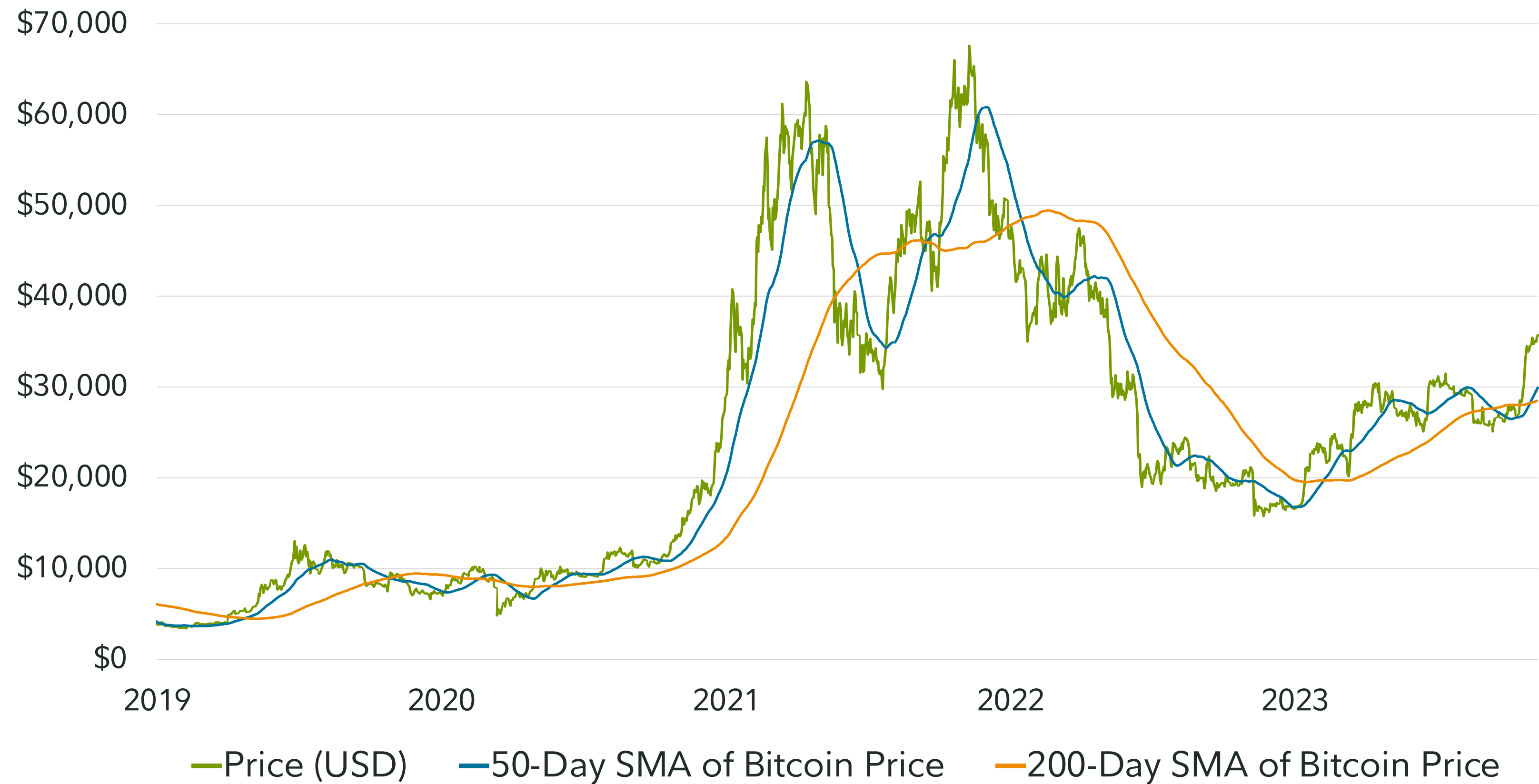
- Year-to-Date returns are now 120%+ for BTC and 75%+ for ETH
- 1-month performance: 31% BTC and 28% ETH
- Driven by ETF speculation?
- Ether outperforming bitcoin - ETF catalyst or something else?

Source: Coin Metrics, 11/13/2023.



# Bitcoin Forms Golden Cross Pattern

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



- 50-Day moving average crosses above 200-Day, indicating bullish sentiment
- Price trading above these levels since mid-October
- Potentially driven by ETF speculation and gamma squeeze in options market

Source: Glassnode, 11/13/2023



# Relative Performance (1M) of BTC and ETH

## ETH/BTC Ratio



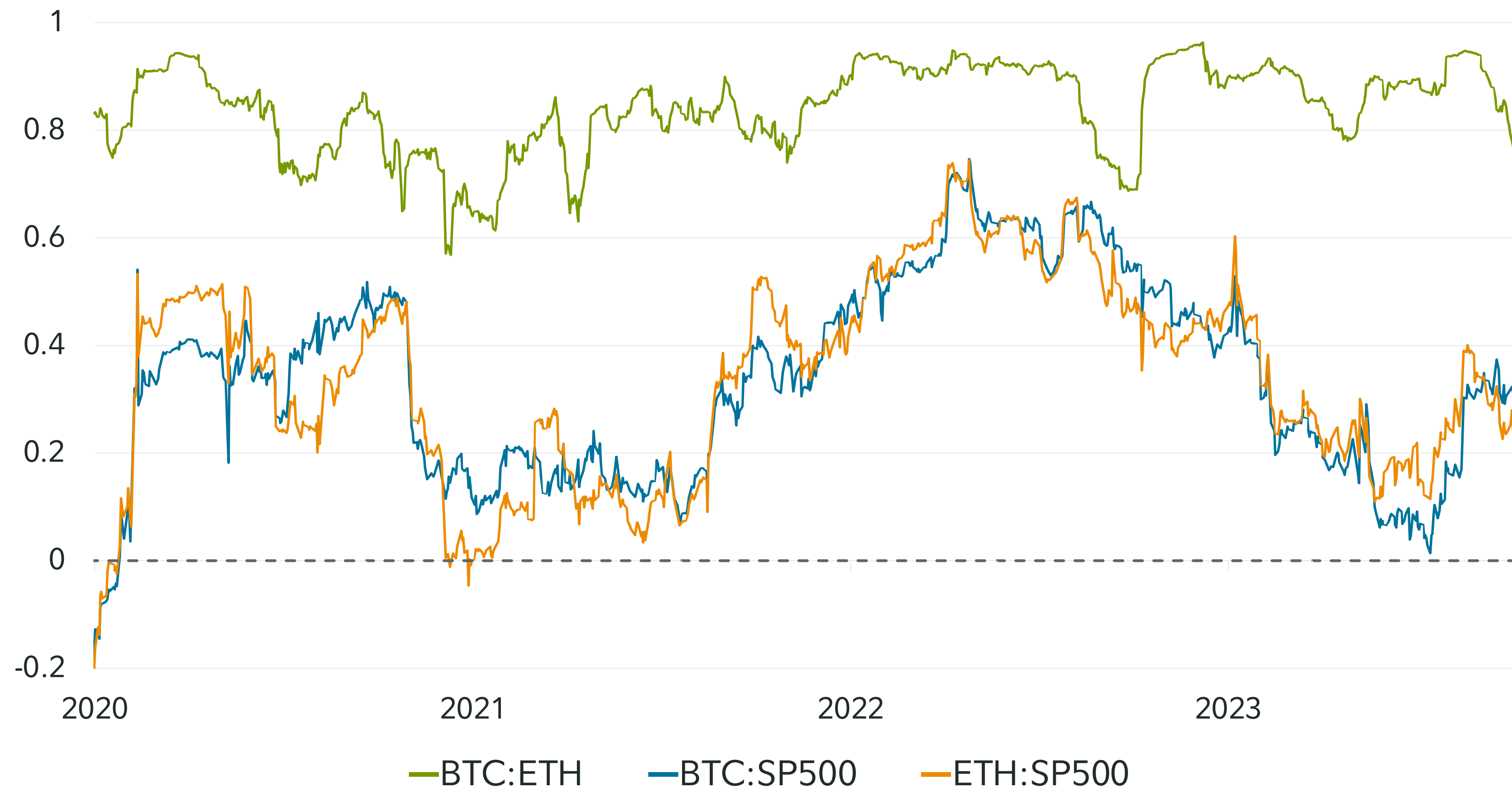
- The positive news around ETF products for both assets has favored BTC more recently
- Possibly due to shorter time horizon to product launch as well as halving in '24

Source: Glassnode, 11/13/2023



# Bitcoin and Ether Decoupling from Equities?

## 60 Day Correlations (Pearson)



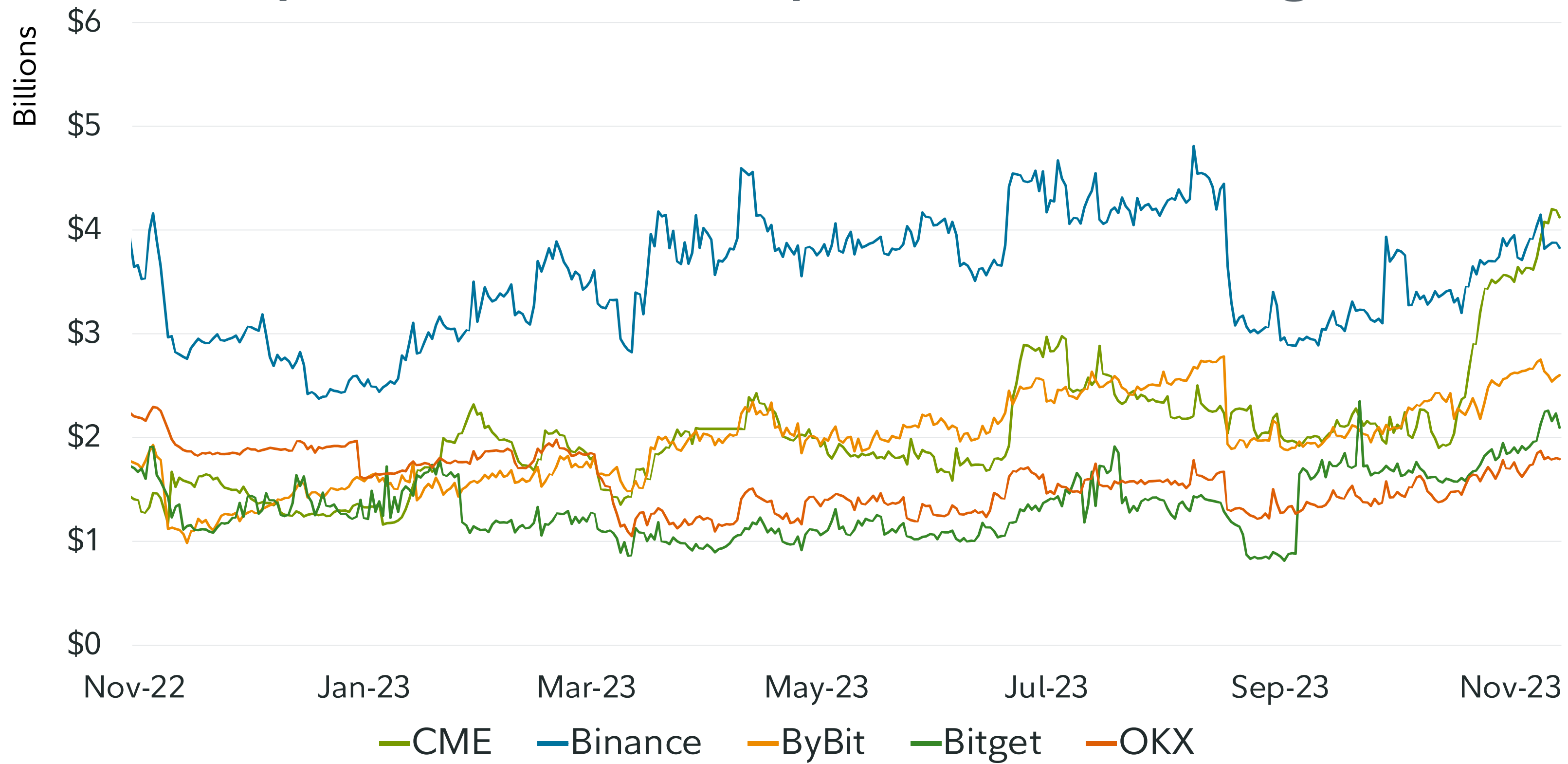
- Bitcoin and ether correlation to equities continue to decline towards zero
- Correlation of 0 indicates no relationship between price action
- Bitcoin and ether correlation has seen sharp drawdown to around 0.6

Source: Coin Metrics, 11/14/2023.



# Is Futures Market Activity a Sign of Institutional Demand?

## Top 5 Bitcoin Futures Open Interest Exchanges



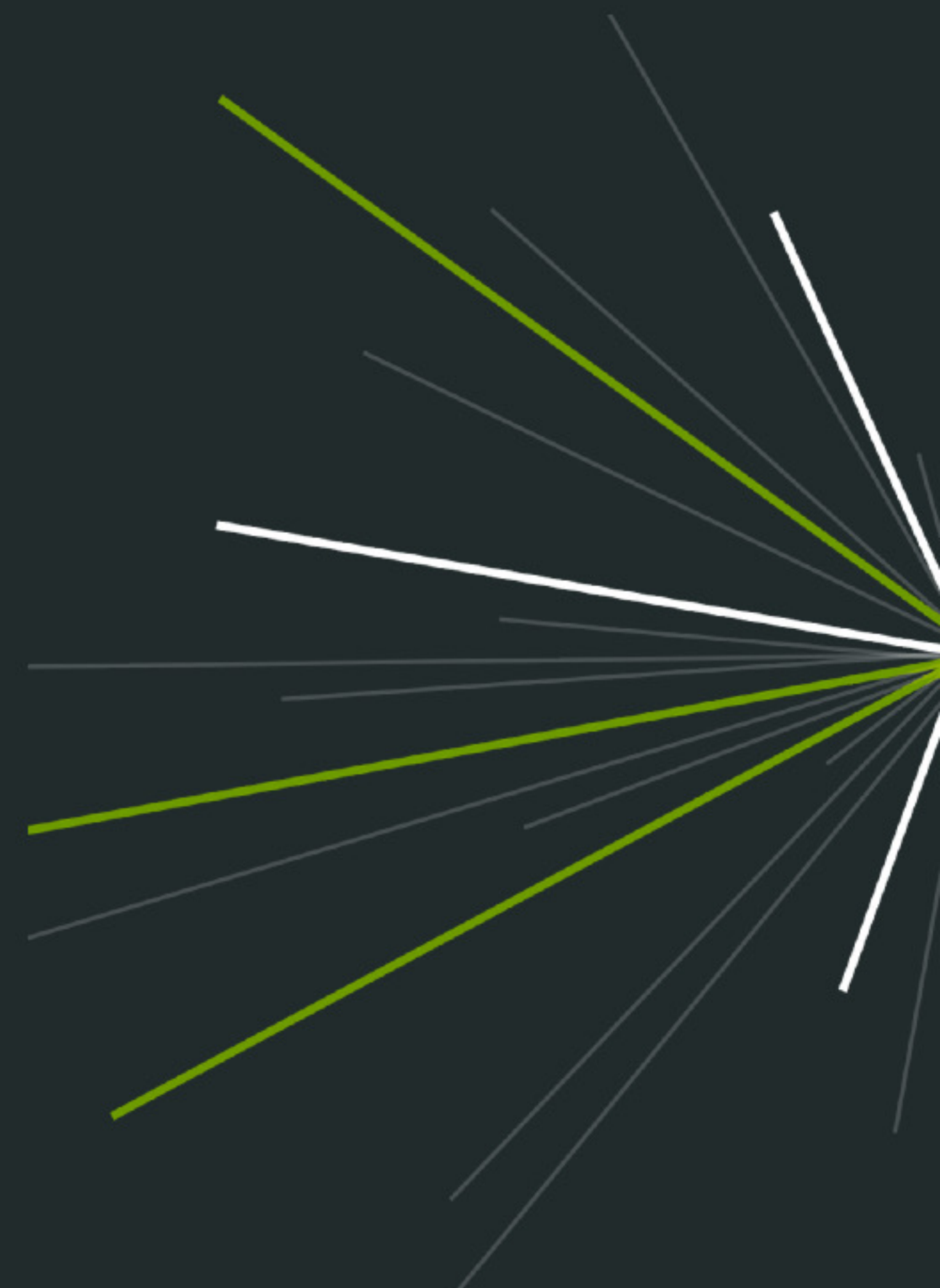
Source: The Block, 11/15/2023.

- CME surpasses Binance for largest amount of futures OI on exchanges
- Bitcoin futures open interest refers to the total number of outstanding Bitcoin futures contracts in the market
- Cboe Digital to launch margined futures for bitcoin and ether – are these signs of increasing institutional demand?





# Making the Headlines This Month



# Recent News

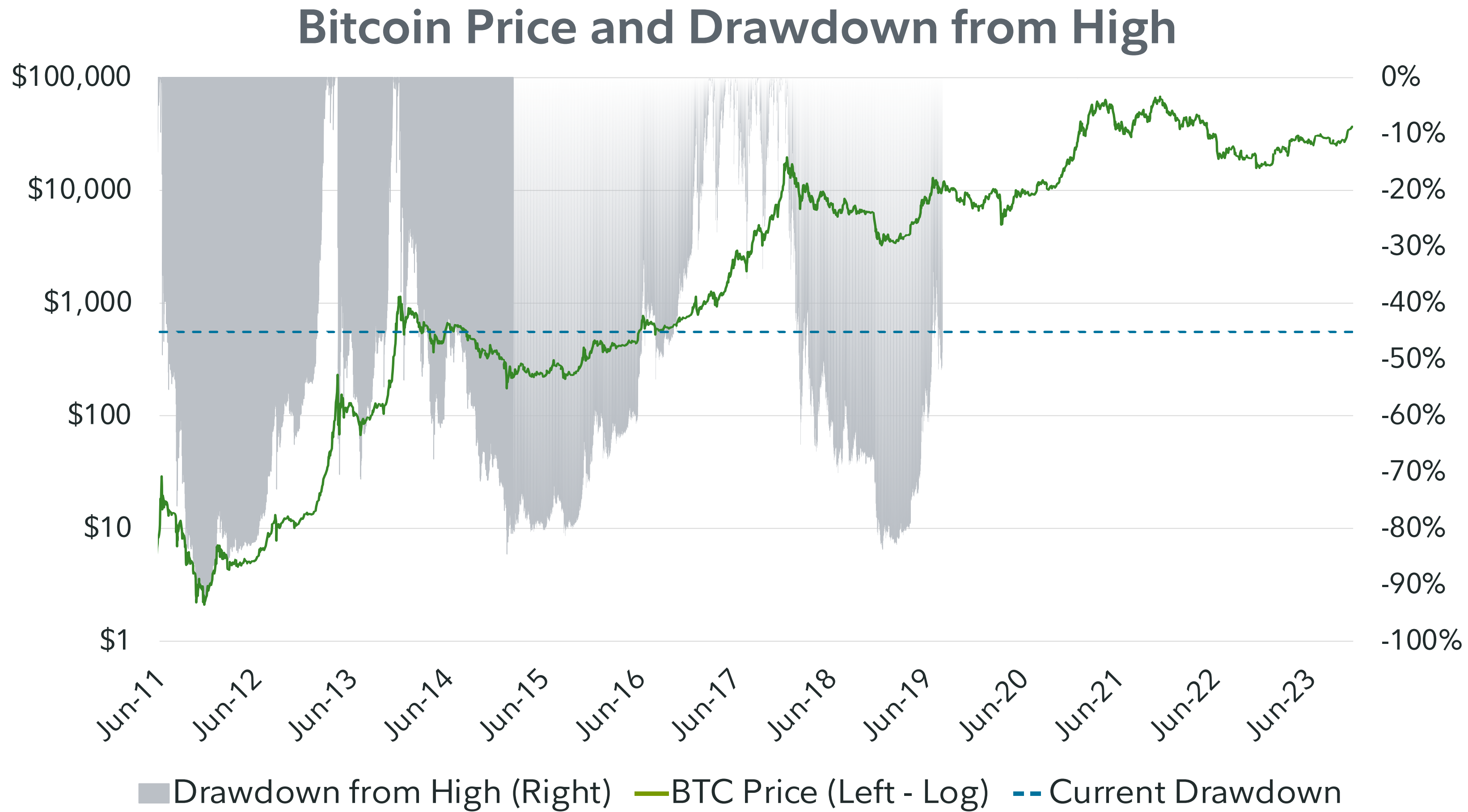
- Blackrock has filed for a spot ether ETF.
- A New York judge approved a Celsius repayment plan involving the use of a mining firm.
- A jury found Sam Bankman-Fried guilty on all counts; he faces up to 115 years in prison.
- Ethereum Layer 2 network Scroll went live in late October.
- Modular data availability Layer 1 network Celestia went live on October 31<sup>st</sup>.
- Cryptocurrency exchange Kraken announced plans to launch a Layer 2 network.
- Centralized exchange OKX launched a decentralized Layer 2 testnet using Polygon's chain development kit.



# Where We are at in the Bitcoin Cycle



# Zooming Out



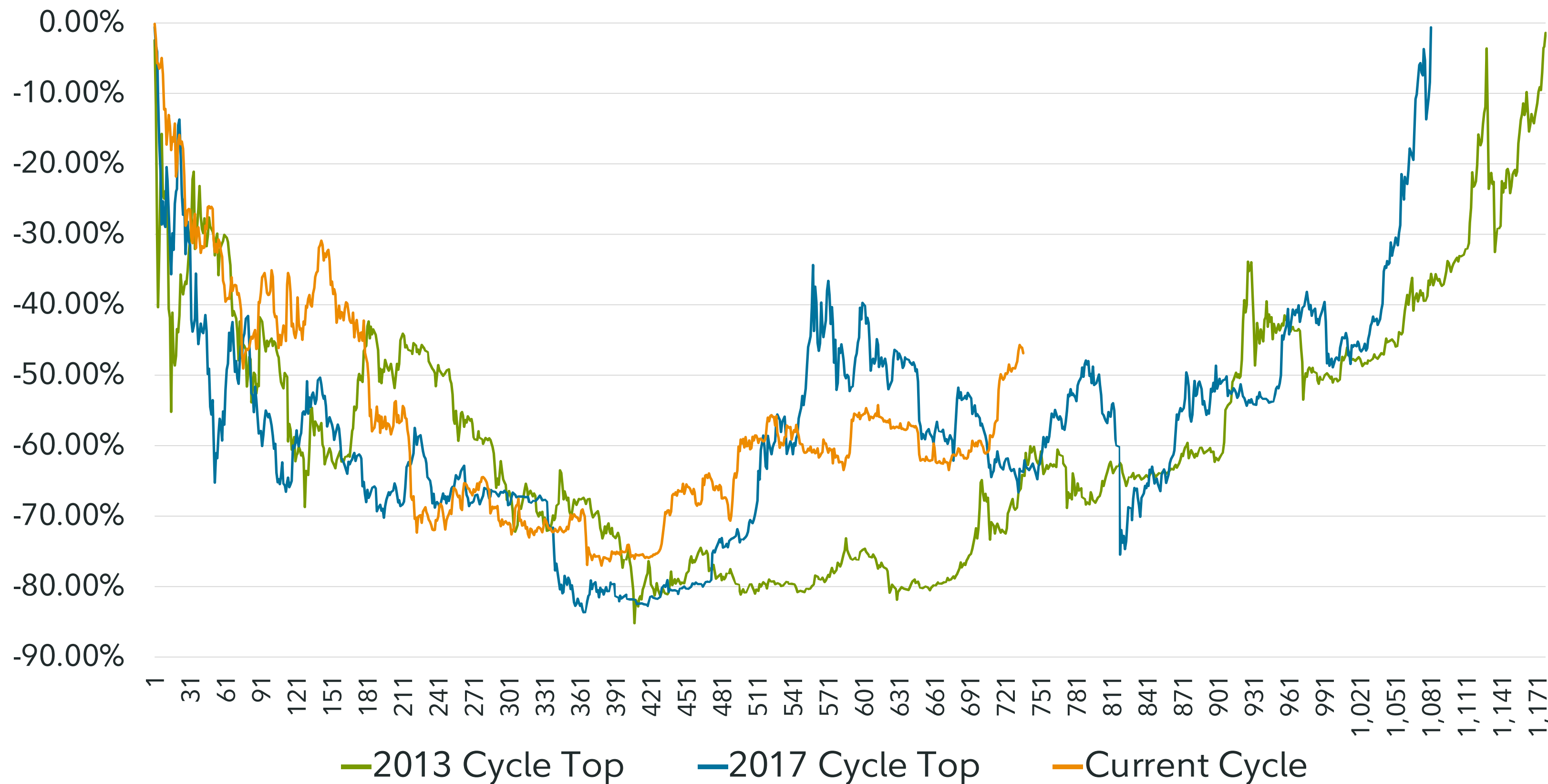
Source: Coin Metrics, 11/13/2023

- Current drawdown is approximately 45% from last all-time high
- Interestingly, long-term treasuries have also experienced similar drawdowns recently



# The Current Bear Market vs Past

## Bitcoin: Days to Return to All-Time Highs



- Potential positive catalysts: positive ETF news, other regulatory clarity, upcoming halving, increasingly illiquid supply
- Potential negative catalysts: negative ETF news or regulatory announcements, increased market volatility or stress, potential flows already priced in

Source: Glassnode, 11/13/2023.

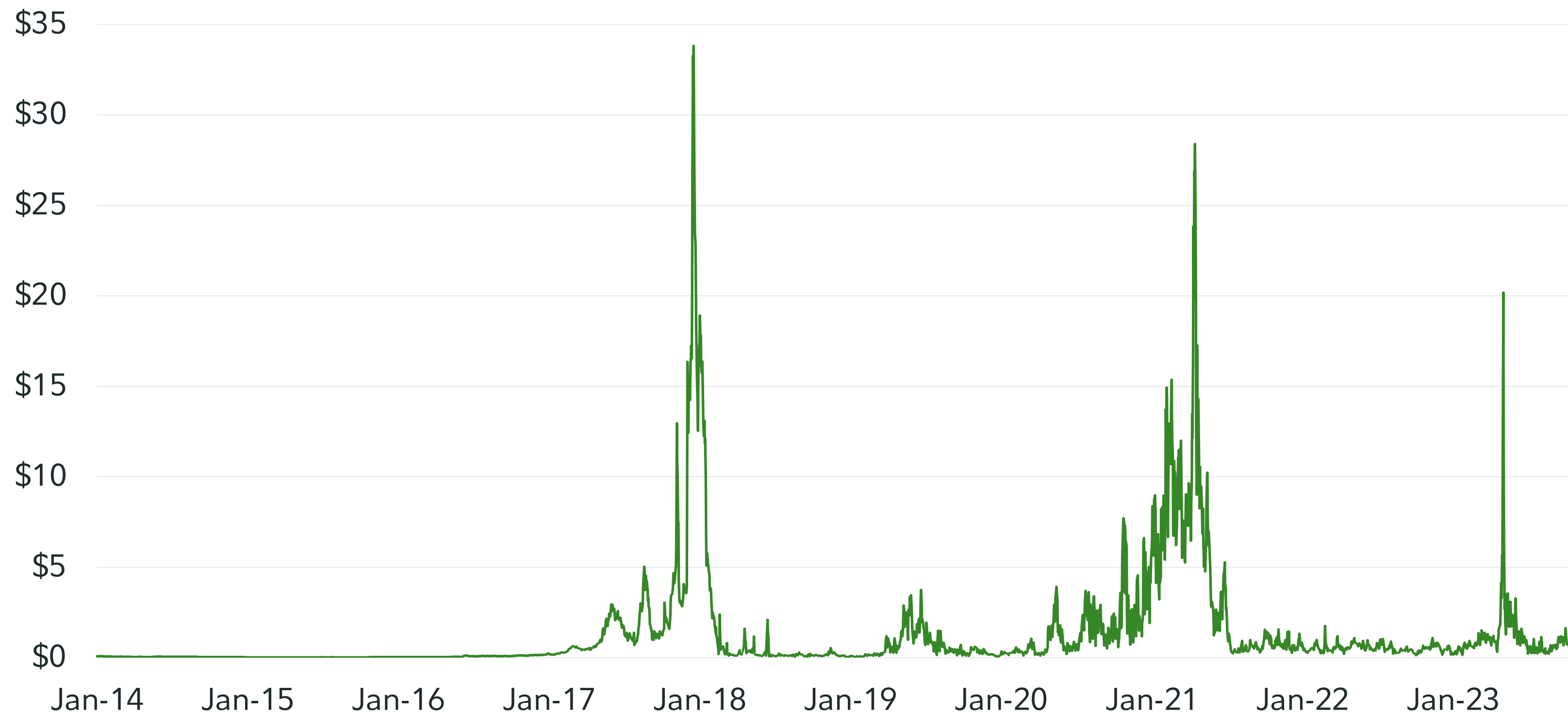




# What is Going on with Bitcoin Fees?

# Bitcoin Fees Reach Levels Not Seen Since May

## Bitcoin Median Transaction Fees (USD)

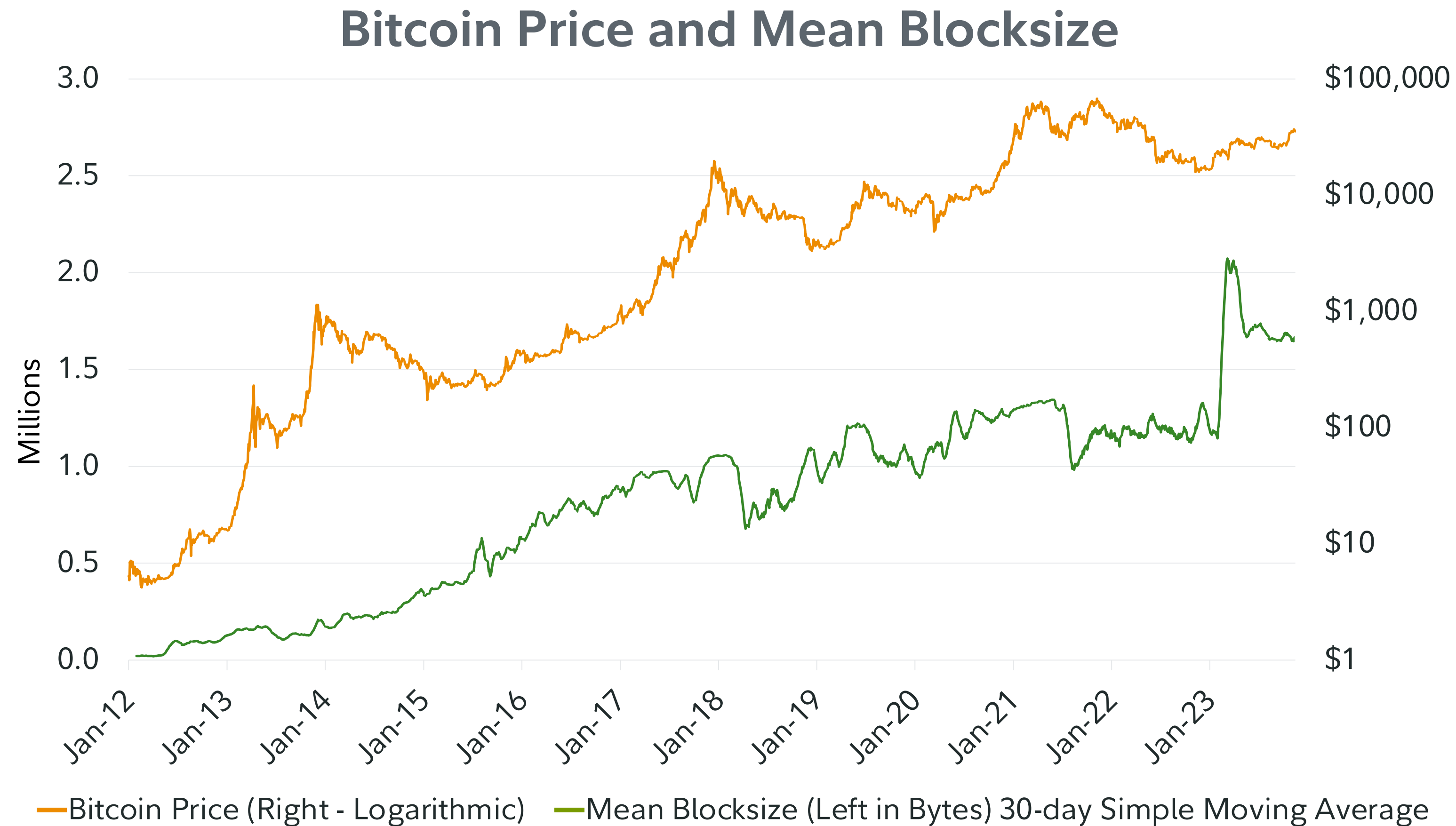


- Bitcoin fees are at their highest levels since Ordinals took off in May
- Driven mostly by recent price action as has previously happened
- But...

Source: Glassnode, 11/12/2023.



# Will Higher or Spiking Fees Be the New Normal?



Source: Glassnode, 11/12/2023.

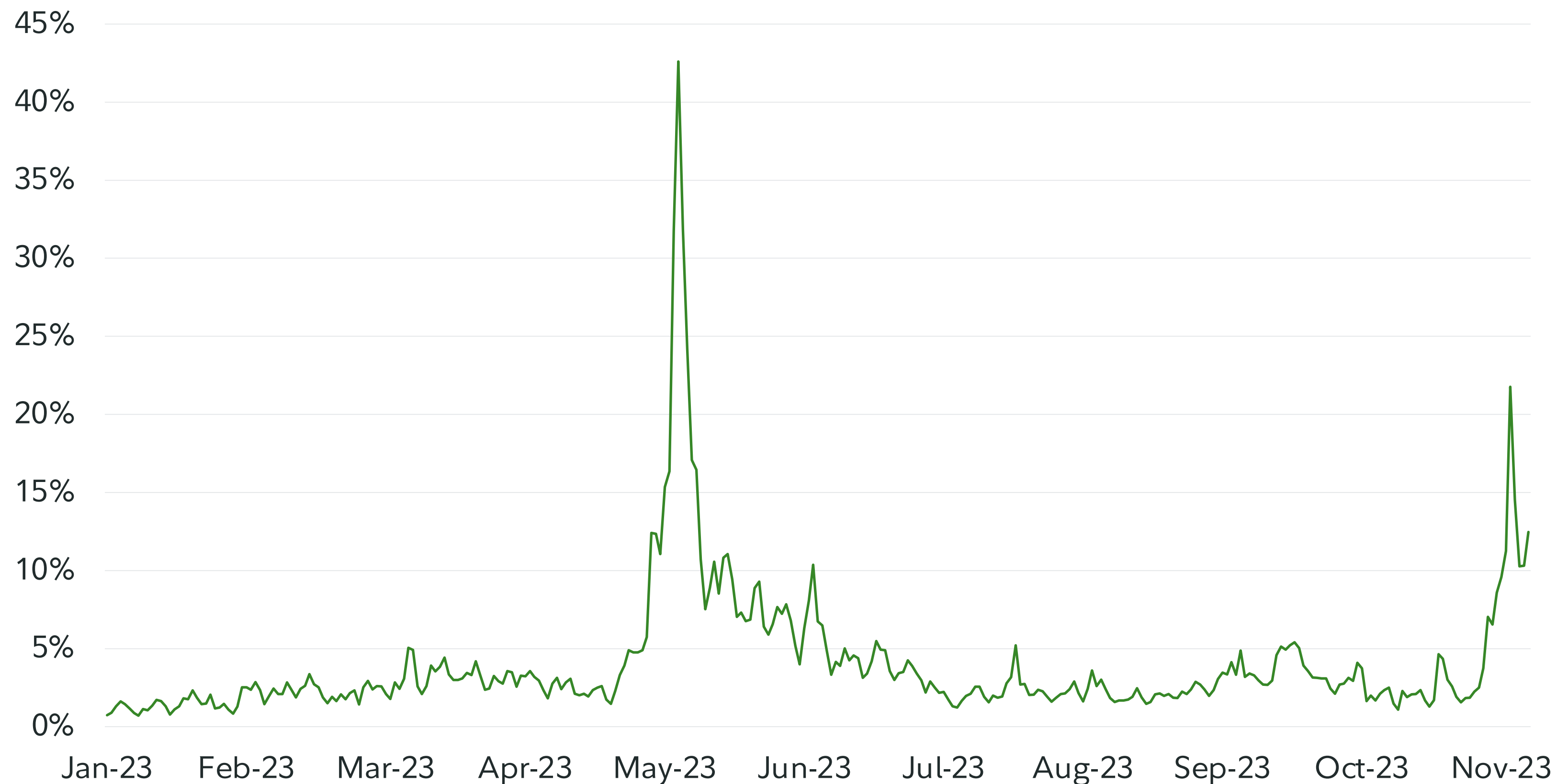
- Conditions were set for higher fees with Ordinals setting more of a floor for fees and consistently filling blocks
- Could we face an environment of fuller blocks and therefore more susceptibility to spiking fees?
- Or is it largely driven by higher time preference users?





# Miners Receiving Greater Revenue from Fees

## Percent Miner Revenue from Fees



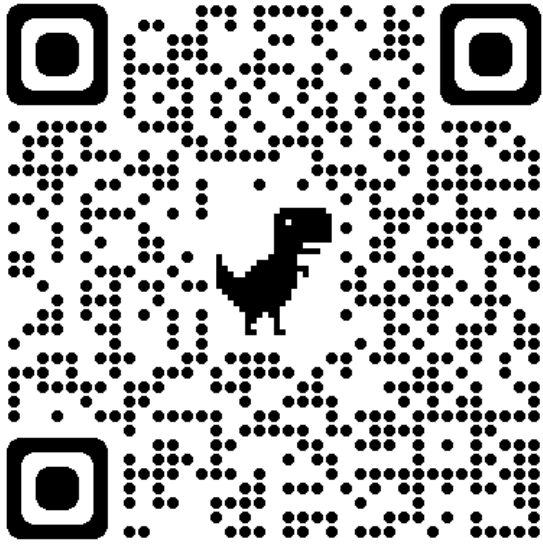
Source: Glassnode, 11/14/2023.

- Miners earned more than 20% of their revenue from fees in October
- With bitcoin supply halving currently set for approximately April 2024, miners may need to increasingly rely on fees to stay profitable
- Therefore, could this be a preview of future fee market structure?



# In Case You Missed It

**Fidelity** DIGITAL ASSETS™




NOVEMBER 2023

## Understanding Proof-of-Work

A nontechnical introduction to bitcoin mining and the implications of proof-of-work for investors

Chris Kuiper, CFA® Director of Research, Fidelity Digital Assets™  
Matt Hogan Research Analyst, Fidelity Digital Assets™



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Q3 2023

## Signals Report

A quarterly breakdown of key market metrics that could be impacting price and investor sentiment.

Fidelity Digital Assets™ Research

### Quarterly Observation of Current Market Conditions

Click the boxes to see how we measured the conditions.

Bitcoin	
Short-Term Outlook (<1 year)	Mid-Term Outl (1-5 years)
Neutral	Neutral

Ethereum	
Short-Term Outlook (<1 year)	Mid-Term Outl (1-5 years)
Negative	Neutral




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## Revisiting Persistent Bitcoin Criticisms

Fidelity Digital Assets™ Research



<https://www.fidelitydigitalassets.com/research-and-insights>



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