COINMETRICS

ANALYST UPDATE
BITCOIN
SEPTEMBER 2025

KEY TAKEAWAYS

Demand for BTC Exposure

Sustained inflows into spot Bitcoin ETFs and the performance of digital asset treasury vehicles such as Strategy highlight investor demand for gaining exposure to Bitcoin (BTC). While this potentially consolidates holdings among few institutions, these products are broadening access for traditional investors.

Lagging Activity

Despite record prices, Bitcoin blocks are not consistently full. While this allows low-value transactions to be included and broadens accessibility, it also raises concerns about miner profitability, as limited fee generation weakens incentives to sustain network security.

Growing Use-Cases for BTC

Wrapped BTC products and emerging native Bitcoin applications are creating new opportunities for holders to earn yield and drive network activity. However, transaction fees remain subdued, failing to rise above $150 since August 2024. Over time, fee revenue will need to play a larger role in sustaining miner incentives and network security.

BITCOIN

Ticker:	$BTC
Class:	Digital Currencies
Sector:	Value Transfer Coin
Current Price (2025-09-02):	$109,995.73
52 Week Range:	$51,643.2439
12-month Price Return:	90.05%
Current Market Cap:	$2,170,551,279,015
Total Supply:	21,000,000
Free Float Supply:	13,945,967.08

PRICE CHART

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Bitcoin Update (September 2025) - Is Network Activity Keeping Up With Market Demand?

Introduction

The growth of regulated Bitcoin investment vehicles and a stream of supportive cryptocurrency legislation has led to a rally in Bitcoin's price. While there have been improvements in investor safety, the sustainability of the underlying network has been dismissed. A long-term investment thesis is incomplete without consideration for network activity.

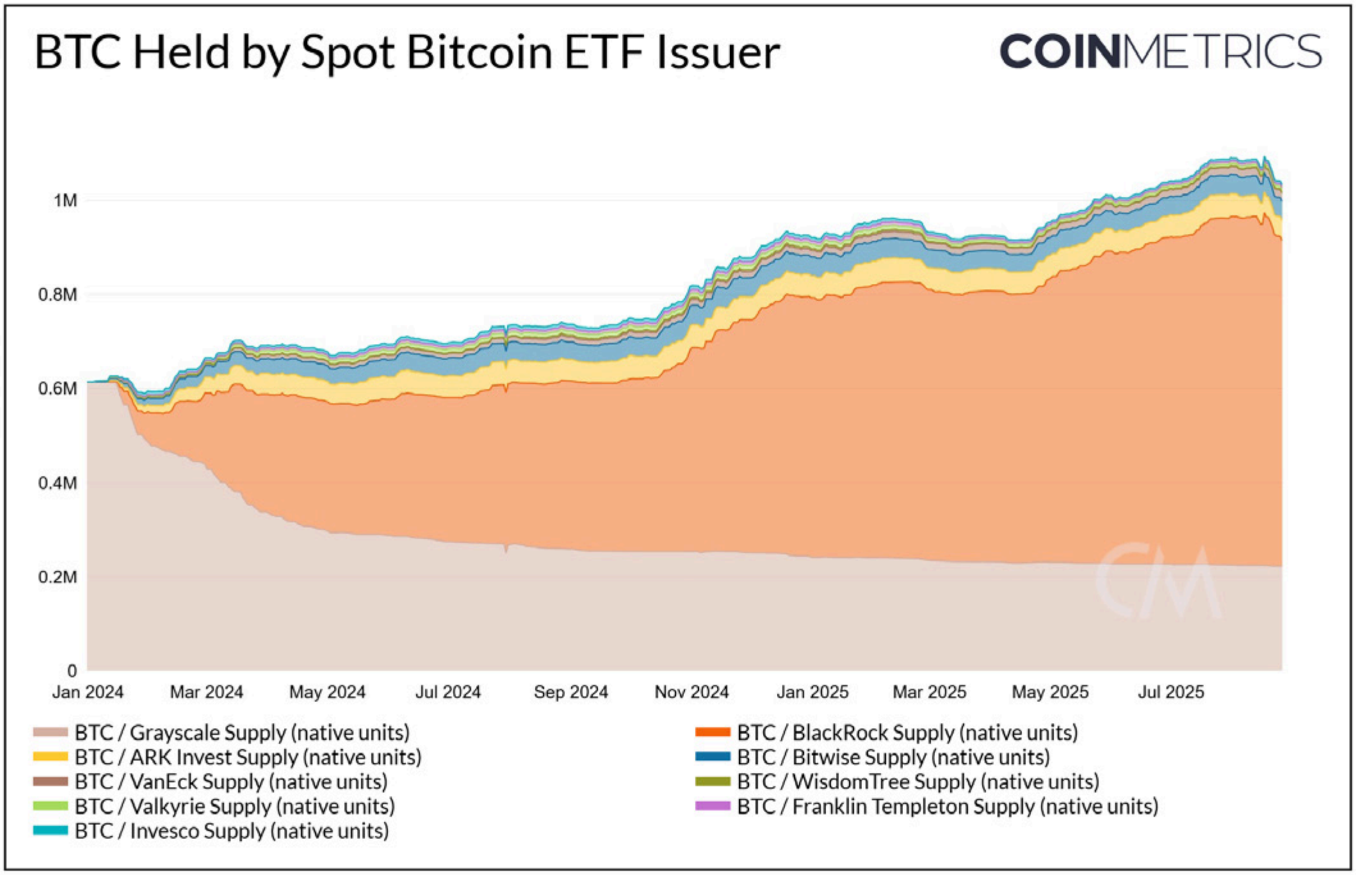
Our initial Bitcoin Asset Analysis in September 2024 highlighted the increasing scarcity of BTC, its benefits in modern portfolio theory, and the emergence of Bitcoin ETFs. BTC has reached a price over $124,000 and ETF inflows trend higher. In this update, we will unpack recent demand for exposure to BTC through ETFs and treasury companies, how this demand has affected network activity, and emerging developments in the Bitcoin ecosystem for 2025 and beyond.

Propelled Bitcoin Interest

Positive U.S. Spot Bitcoin ETF Inflows

U.S. Bitcoin Spot ETF interest has started and stalled since approval in January 2024. Today, over 1 million BTC is held in BTC ETFs or more than 5% of current supply. With bitcoin price reaching new all-time highs, institutions and traditional portfolios have renewed interest in the ETFs as they rush to add exposure to BTC.

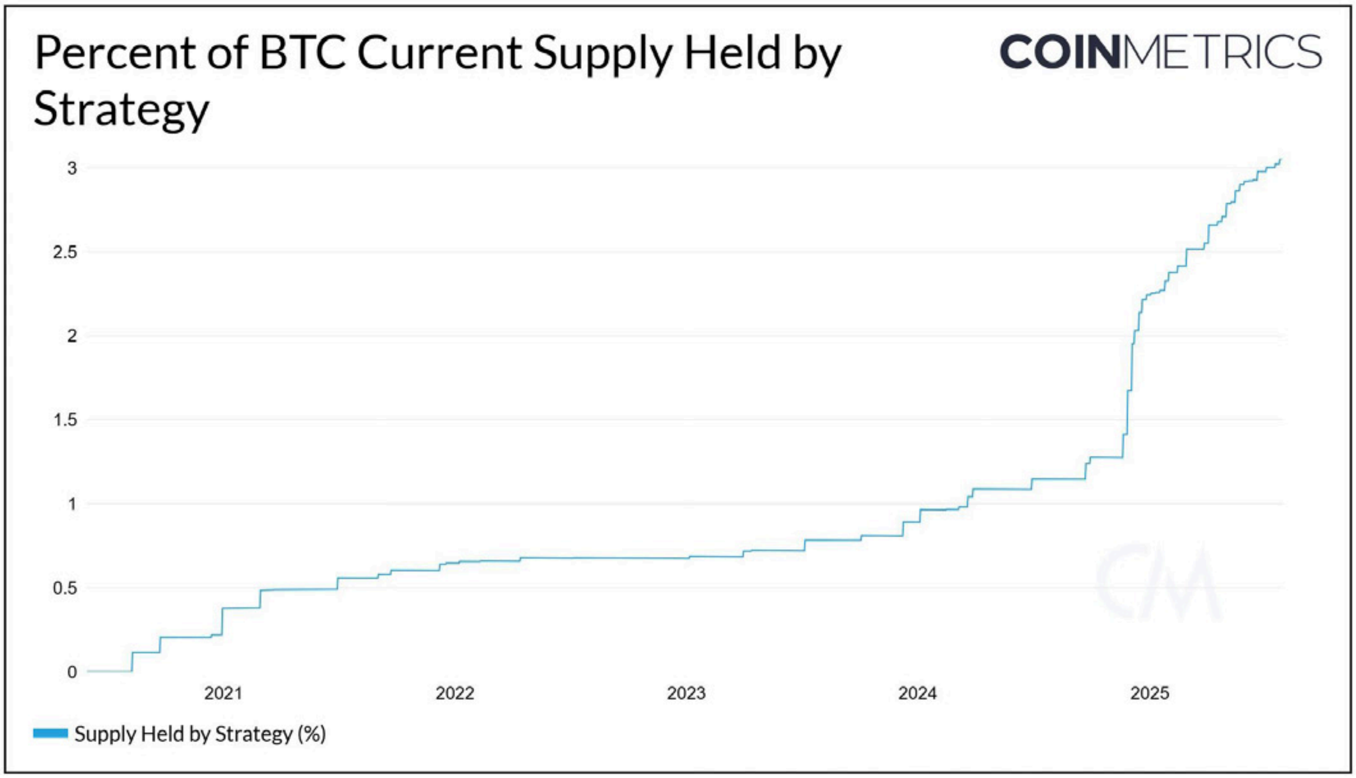
The rise in Bitcoin ETF inflows can be explained by a few factors. First, modern portfolio theory suggests investing in BTC improves risk-adjusted returns [1]. BTC's low correlation with gold and equities helps diversify portfolios and hedges against market downturns [2]. Second, self-custodying BTC requires significant investment in seed-phrase management and multi-signature wallet security. ETFs abstract these custodial complexities. Third, ETFs can be accessed through traditional brokerage platforms, meeting investors where they already exist instead of connecting to new crypto exchanges or conducting peer-to-peer transactions.



Strategy's Rise as a Leveraged Bitcoin Investment

Investors demanding more exposure to Bitcoin have begun investing in publicly-traded companies building treasuries composed of Bitcoin, specifically Strategy (NASDAQ: MSTR).

Strategy's more volatile stock performance against BTC offers more upside than if investors were to purchase BTC ETFs. This is due to the recursive leverage created by Strategy to buy BTC. Strategy's volatility allows the firm to consistently issue low-interest, convertible notes that can be hedged by experienced investors, using the funds to buy BTC [3]. Strategy prioritizes increasing its underlying BTC per common share outstanding known as "BTC Yield". Investors expect Strategy will consistently increase its BTC holdings – this has led to the stock trading at a premium to the value of its underlying treasury [4]. Strategy now holds over 628,000 BTC or 3% of current Bitcoin supply. For reference, this is only 100,000 BTC less than all BTC held by BlackRock's Bitcoin ETF held on behalf of millions of investors.



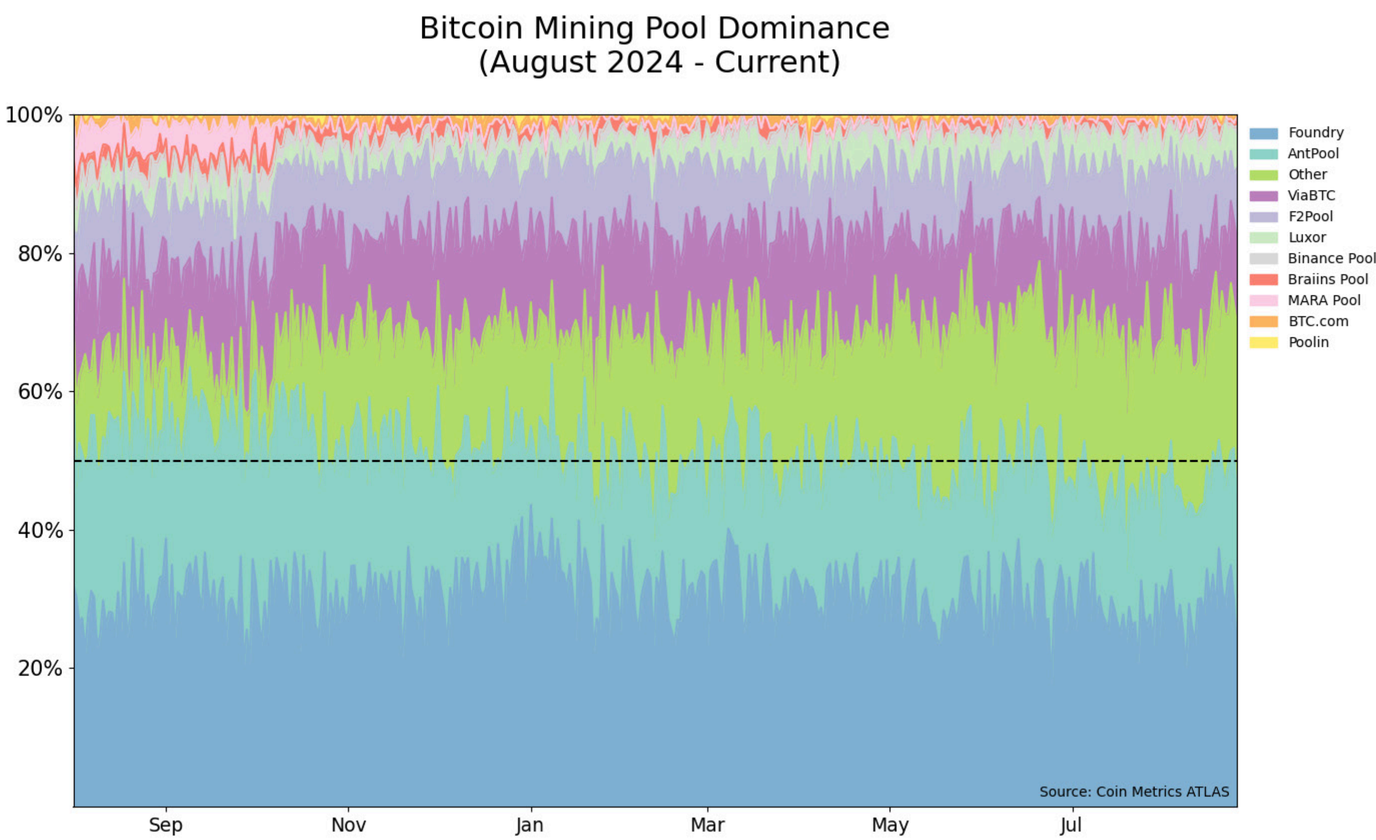
Strategy uses a conceptual “BTC Risk” metric to illustrate the probability that the value of the BTC backing issued bonds will fall to the bond’s par value. Materialization of this risk, driven by a prolonged decrease in BTC price, could reduce the ability to finance future BTC purchases and lead to liquidating holdings to meet debt obligations [5].

Is Network Activity Correlated with BTC Demand?

Similar to how a company's revenue drives value to the share price, fees are expected to drive value for the token price. Fees indicate network usage and are typically paid to miners to incentivize securing the network. Passive holding of BTC reduces network activity, fees generated, and risks network security. If miners do not receive enough BTC from issuance and transaction fees, they may cease operations to prevent losses, leading to a concentration in hashpower to fewer operators. We can clearly assess whether there has been a rise in fee activity driving BTC price.

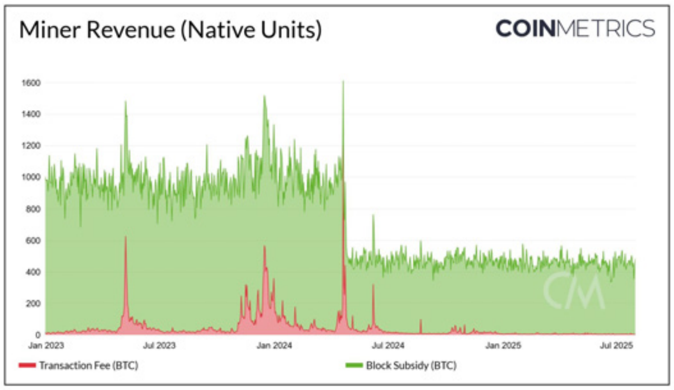
Sustained Mining Pool Dominance

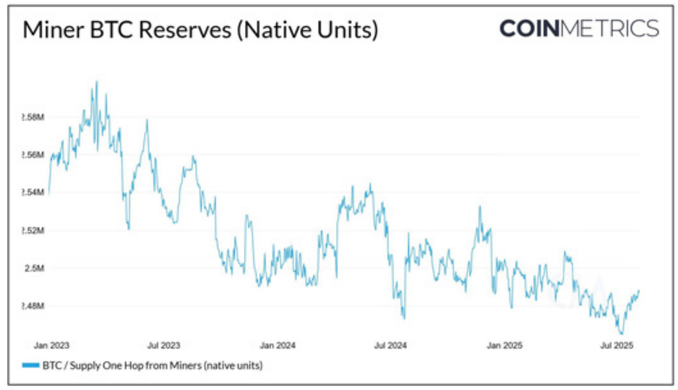
Control of total hashpower by top mining pools remains consistent since our initial Bitcoin Asset Analysis. U.S.-based pool Foundry dominates around 30% of hashpower, followed by Chinese-based Antpool controlling 18% of hashpower. Miners persistently race to control hashpower and the network to maximize their reward potential. The difficulty of producing the next block is at all time highs, showing pools are not slowing down investing in new miners to maintain their position in the network.



Unsustainable Miner Revenues

While pools retain control of the network, individual miner revenues are increasingly dependent on Bitcoin price. Transaction fees continue to fall after Bitcoin's 4th halving in April 2024, recently accounting for less than 1% of total miner revenues. Individual miners hold less bitcoin, in part for operational security, but also selling BTC to cover operating expenses.

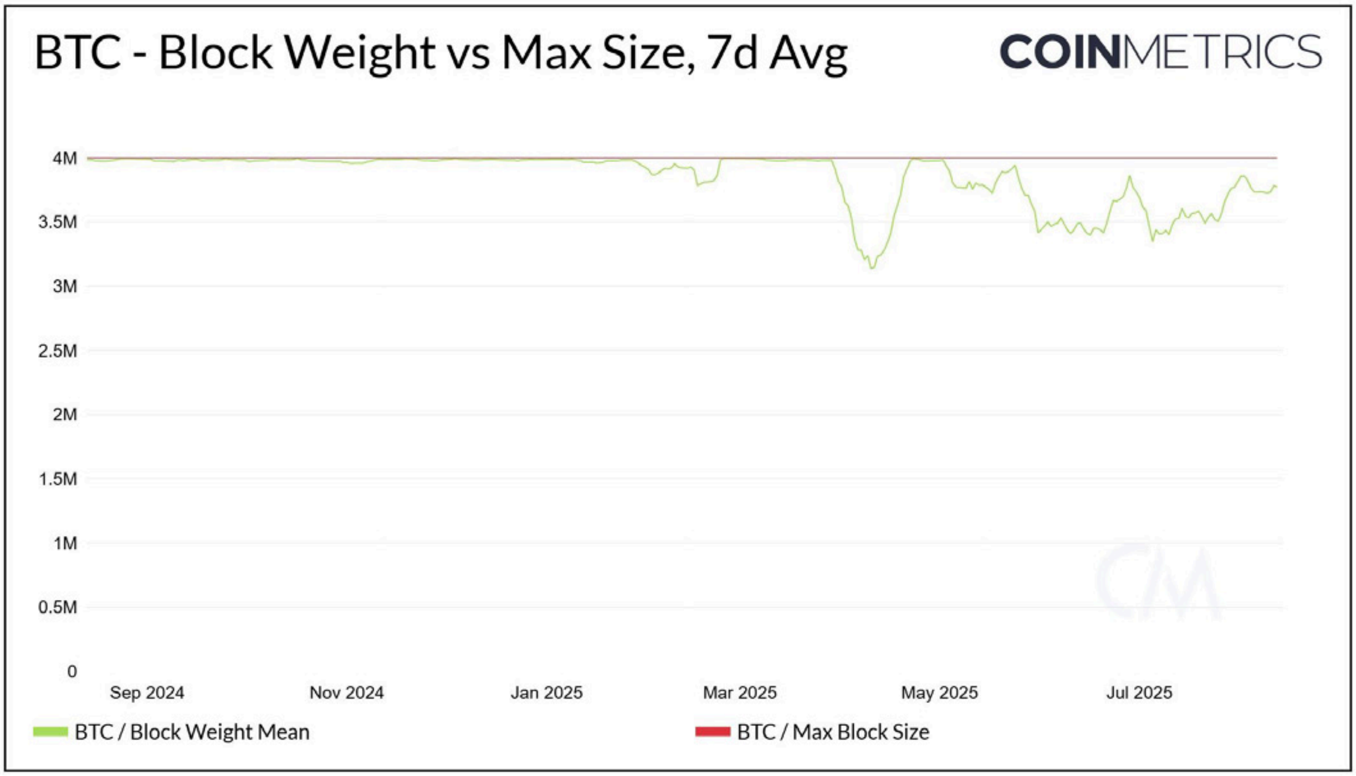




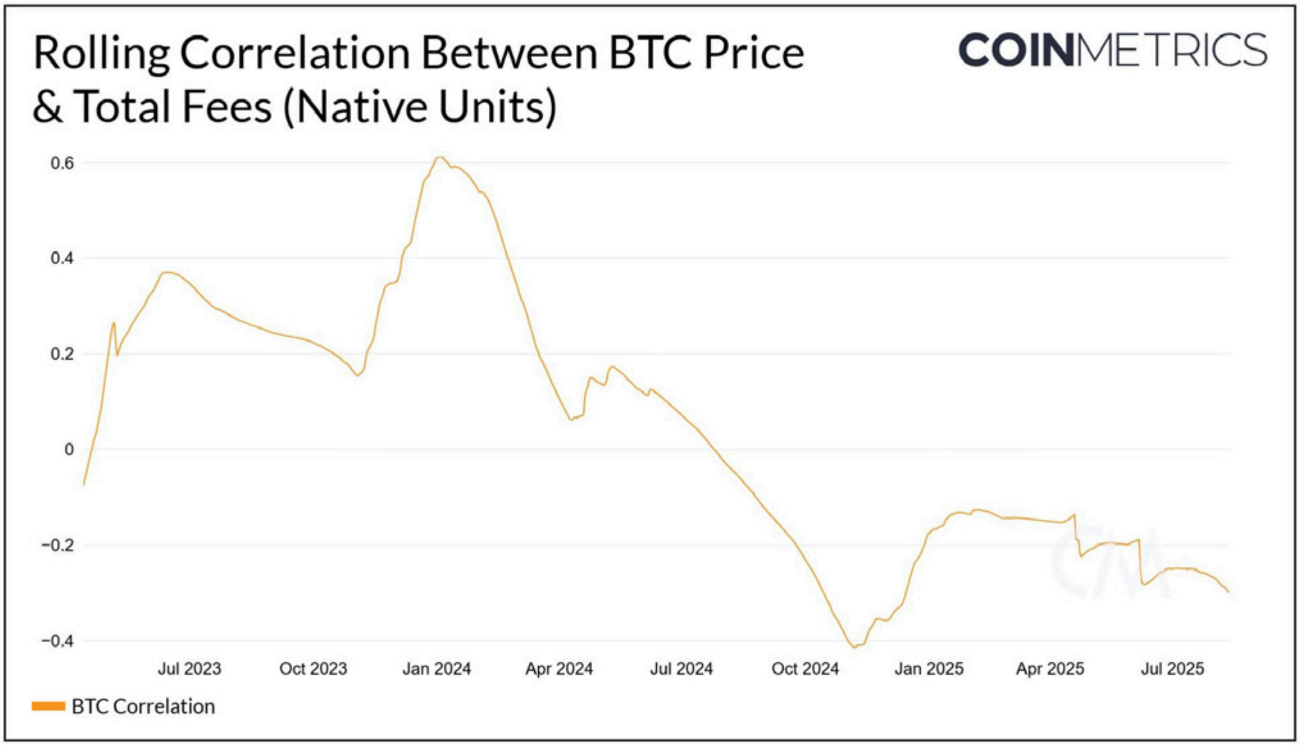
After Bitcoin's 5th halving, projected to occur in 2028, miners will only earn 1.5625 new BTC per block. This reduction in revenue may force miners offline if they can no longer remain profitable [6]. Offline miners put Bitcoin's decentralization and security at risk. Fee revenue will become an increasingly important incentive for miners to continue securing the network and prevent consolidation of hashpower. A surge in network activity driving an increase in fees or alternative applications creating new blockspace demand must develop to subsidize a drop in BTC issuance.

Lagging Activity

Since January 2025, blockspace has become increasingly abundant compared to the average blockspace available in 2024. Block Weight measures the size of transactions included in a block – more complex transactions are heavier and take up more blockspace than simpler transactions. Today, blocks have room for more transactions to be included if there was more demand [7].



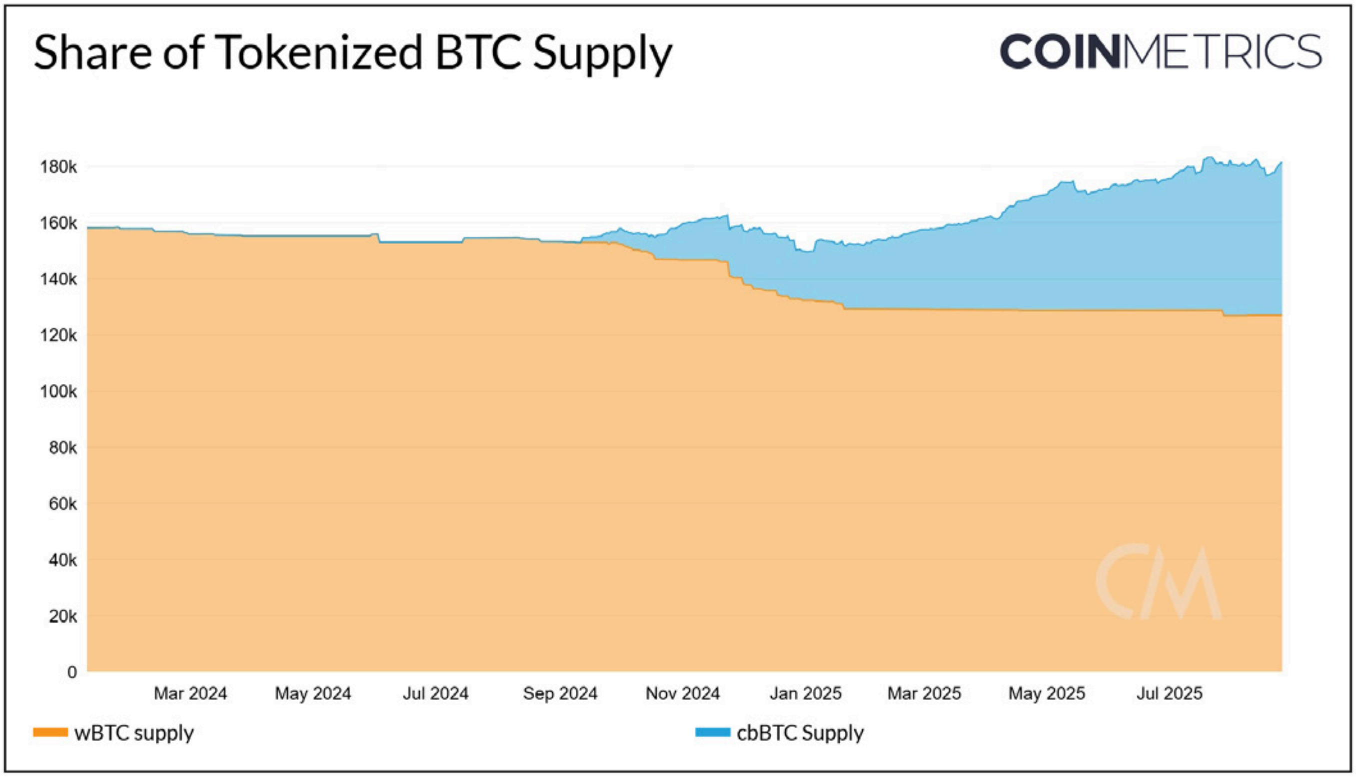
Low demand for blockspace results in low fees, enabling many fee-sensitive users to participate on the network. While low fees democratize access to transferring value on a censorship-resistant network, there is little correlation between the demand of BTC the asset and Bitcoin blockspace from institutional investors. BTC is increasingly viewed as “digital gold” and a store of value. Rather than being valued based on fees generated by the network, bitcoin’s appeal lies in its ability to hedge against inflationary pressures from fiat currency and serve as an alternative means of storing or transferring value.



BTC Use-Case Developments in 2025

Emerging Wrapped BTC Alternatives

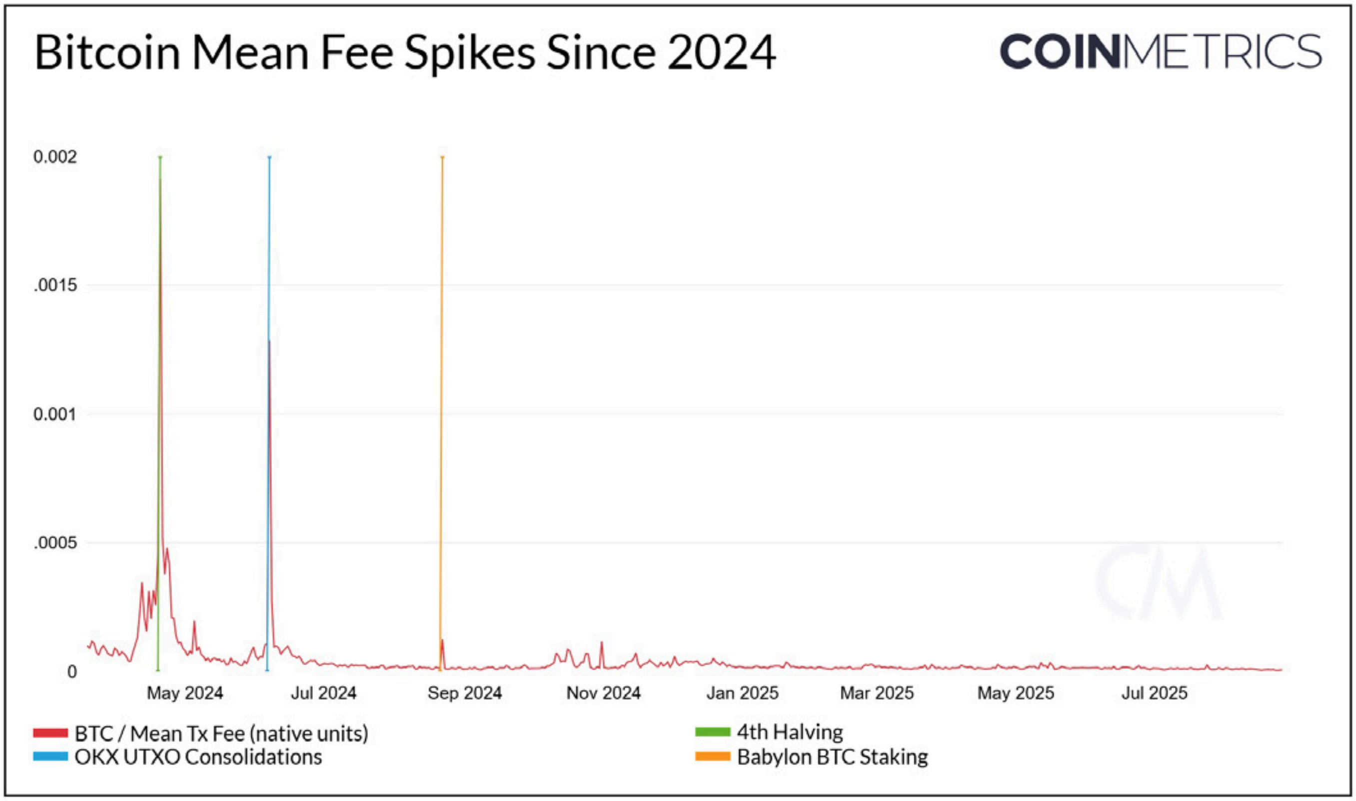
Coinbase's cbBTC has surged in new supply in the midst of custodial adjustments to BitGo's wBTC. Users search for yield opportunities on other networks by locking bitcoin for tokens such as cbBTC and wBTC representing the underlying asset. While BitGo has commanded a majority of market share of tokenized bitcoin, BitGo's adjusted custodial model in partnership with BitGo Singapore Ltd., and BiTGlobal announced in August 2024 created fears around reserve management. As a result, BitGo's supply of custodied BTC is stagnant, leveling off at around 127,000 wBTC and down from a total supply of 153,000 wBTC last year. Meanwhile, cbBTC has risen to over 52,000 BTC supply since its creation in August 2024. Despite BitGo still custodying a majority of BTC for users, Coinbase continues to siphon off market share.



Growing Native BTC Applications

Developers are building applications to reduce dependencies of custodial and bridge risks for users using their bitcoin to find yield opportunities. Instead of holding tokenized BTC, holders can use their native BTC to interact with applications.

Babylon Genesis Chain incentivizes staking BTC with operators to secure external Proof-of-Stake (PoS) networks. Using the Bitcoin Network to validate state changes of PoS networks improves chain security and generates fees for Bitcoin miners. BTC stakers earn rewards from networks paying for operators to help validate the state of the network while retaining custody of their BTC. The anticipation for Babylon staking was evident by the increase in demand for blockspace when deposits were initially opened on August 22, 2024 – network fees jumped over $150, the highest fee per block since OKX's UTXO Consolidations in June 2024.



Transaction fee spikes have not reached more than $150 since Babylon staking. Until there is another reason for users to rush to include their transactions in the next block, fees will persistently contribute a small portion of revenue to miners. The lack of sustained revenue from fees forces miners to rely more on new BTC issuance to maintain operations.

Outlook

Growing demand for BTC through ETFs and DATs largely explains the recent strong performance of BTC. This demand, however, has not translated to growth in network activity.

Sustained low fee revenue creates an opaque outlook for Bitcoin's health. Transaction fees are increasingly critical to reward miners for securing the network as new BTC issuance decreases. If miners are forced to leave the network due to prolonged drawdowns, this would put the network's decentralization and censorship-resistance at risk, thus losing a core value proposition of Bitcoin.

More native BTC applications can return fee revenue back to miners instead of activity being offshored to other blockchains. If Bitcoin is to live up to its lofty valuation, network activity and miner incentives will have to pick up soon.

References

[1] M. Hougan, G. Choudhury, and M. Kolar. *Bitcoin's Role in a Traditional Portfolio*. Bitwise Asset Management. https://s3.us-east-1.amazonaws.com/static.bitwiseinvestments.com/Research/Bitcoins-Role-in-a-Traditional-Portfolio-032025.pdf (March, 2025).

[2] T. Ved and V. Ramirez. *Is Bitcoin Decoupling from the Market?* Coin Metrics, *State of the Network*, Issue 310. https://coinmetrics.substack.com/p/state-of-the-network-issue-310 (May 6, 2025).

[3] T. Ved. *MicroStrategy's Bitcoin Mega Strategy*. Coin Metrics, *State of the Network*, Issue 287. https://coinmetrics.substack.com/p/state-of-the-network-issue-287 (November 26, 2024).

[4] P. Bush and M. Sigel. *Deconstructing Strategy (MSTR): Premium, Leverage, and Capital Structure*. VanEck Insights – Digital Assets blog https://www.vaneck.com/us/en/blogs/digital-assets/matthew-sigel-deconstructing-strategy-mstr-premium-leverage-and-capital-structure/ (May 22, 2025).

[5] *Second Quarter 2025 Earnings Presentation*. Strategy. https://assets.contentstack.io/v3/assets/bltf8d808d9b8cebd37/blt3758ba103764912f/688cf843a168ff712977f926/q2-2025-strategy-earnings-presentation.pdf (July 2025).

[6] K. Lu and Coin Metrics Team. *Understanding Miner Economics From First Principles*. Coin Metrics, *State of the Network*, Issue 44. https://coinmetrics.substack.com/p/coin-metrics-state-of-the-network-e18 (March 31, 2020).

[7] W. Owens. *Where Did All the Fees Go? Analyzing Bitcoin's Onchain Activity and UTXO Set*. Galaxy Insights – Research https://www.galaxy.com/insights/research/bitcoin-onchain-fees-utxo (August 20, 2025).

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