

State of Bitcoin Q3 2025

Navigating a Low-Volatility Distribution as Institutional Demand Matures



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This report is a product of Teroxx Research, a research team within Teroxx, the leading provider of financial services in the digital assets, cryptocurrency, and blockchain technology sector. Teroxx Research provides top-tier market commentary, thematic views, tactical insights, and deep protocol research.

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Executive Summary: Bitcoin in Q3 2025

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Bitcoin experienced a quarter of transition and consolidation in Q3 2025, marking a notable shift in market dynamics following a blockbuster Q2 recovery from April lows of \$74,000 to \$111,000. The third quarter initially saw continued positive momentum, with Bitcoin establishing two new all-time highs - reaching \$123,000 on July 14th and \$124,000 on August 14th. However, this strength proved temporary as the market retraced from these peaks in the final two weeks of September, ultimately leaving Bitcoin largely flat for the quarter at approximately \$111,000-112,000, virtually unchanged from where it began. This consolidation phase saw Bitcoin's market dominance decline from 64% to 56%, as capital rotated toward Ethereum and select altcoins. The ETH/BTC ratio's 62% rise over the quarter underscored this leadership change, as Bitcoin entered what could be characterized as a "low volatility phase of distribution." Notably, this temporary pause would prove to be a springboard for renewed strength, with Bitcoin rallying to \$126,000 in early Q4 and achieving a market capitalization exceeding \$2.5 trillion.

Despite the subdued price action within Q3, on-chain metrics suggest the Bitcoin market remains healthy and far from overheated territory. The MVRV Z-score, a key valuation indicator comparing market price to the average cost basis of coins on-chain, currently sits near 2 - well above bear market lows but significantly below the levels of 7 typically seen at previous cycle peaks (see chart below). This suggests that while the market has matured beyond its accumulation phase, there remains considerable room for expansion before reaching historically overheated conditions.

Long-term holder behavior provided important context for the quarter's price dynamics. Approximately 507,000 BTC moved from long-term holder wallets as investors took profits at new highs, a pattern consistent with previous Bitcoin cycles¹. This distribution was particularly notable given the involvement of early Bitcoin adopters, including one remarkable transaction where Galaxy Digital facilitated the sale of over 80,000 BTC on behalf of a "Satoshi-era" investor in July - one of the largest over-the-counter transactions in Bitcoin's history.

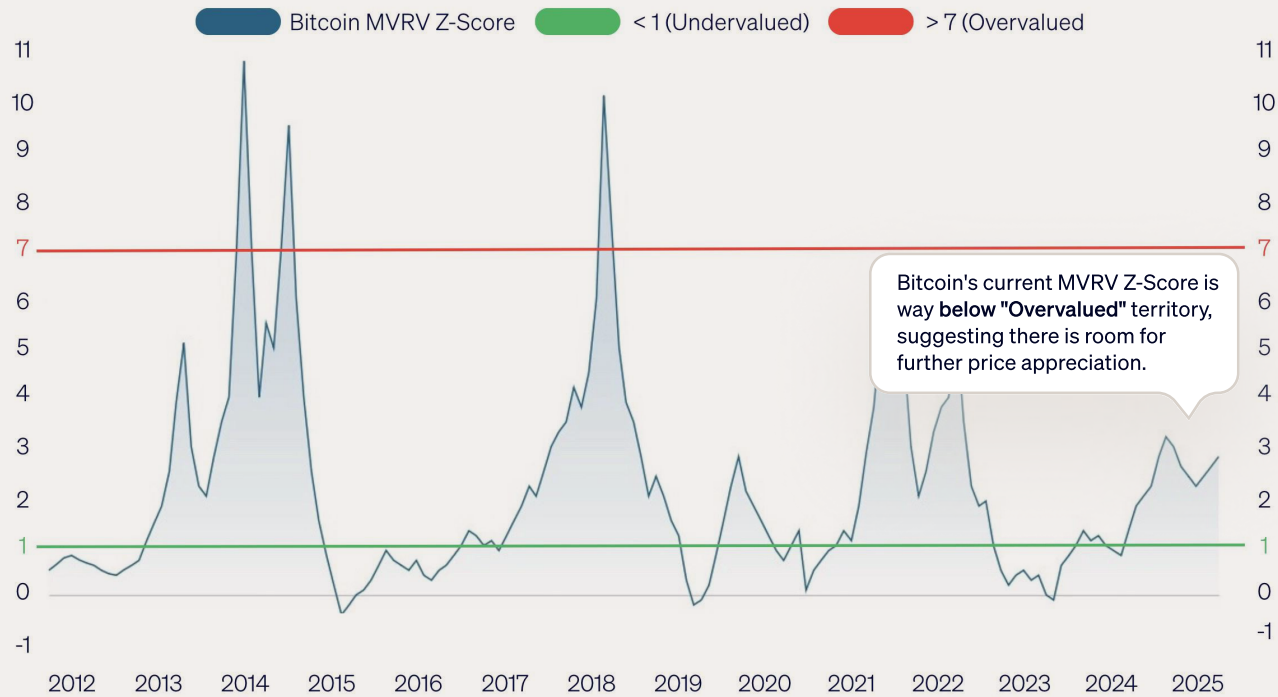
The institutional infrastructure supporting Bitcoin continued to mature, providing crucial demand to offset the distribution from long-term holders. Digital Asset Treasuries now collectively hold approximately 3.6% of Bitcoin's total supply², though accumulation rates from major holders like MicroStrategy have moderated, with their holdings stabilizing around 640,000 BTC. Spot Bitcoin ETFs maintained steady inflows throughout the quarter, creating what the report describes as "robust market liquidity" that effectively absorbed selling pressure and anchored demand during this transitional period.

Looking forward, Bitcoin's Q3 consolidation appears to have been a healthy pause rather than a concerning reversal. The combination of moderate valuations, continued institutional adoption, and healthy on-chain fundamentals - validated by the subsequent rally to new highs in Q4 - suggests the market has successfully navigated a natural distribution phase without compromising its longer-term trajectory.

¹ Source: Coinmetrics <https://docs.coinmetrics.io/network-data/network-data-overview/supply/active-supply>

² Source: Artemis, as of 16th Oct 2025: <https://app.artemisanalytics.com/digital-asset-treasuries>

Bitcoin MVRV Z-Score (Past 3 Years)



Source: Coin Metrics, Teroxx

Teroxx Educational Corner

Teroxx Decoded

The **MVRV Z-Score** is a Bitcoin valuation metric that measures how far the current market price deviates from the average acquisition price of all Bitcoin holders on-chain, expressed in standard deviations.

Breaking it down:

MVRV (Market Value to Realized Value) compares:

- **Market Value:** Bitcoin's total market capitalization (current price × circulating supply)
- **Realized Value:** The aggregate cost basis of all Bitcoin, calculated by valuing each coin at the price when it last moved on-chain

How to interpret it:

- **Below 0-1:** Indicates the market is trading below the average cost basis - typical of bear market bottoms and capitulation phases
- **2-3:** Suggests moderate valuation with room for growth (where Bitcoin was in Q3 2025)
- **Above 6-7:** Signals overheated conditions historically associated with market cycle peaks
- **Negative values:** Indicate the market price is below the realized price, meaning the average holder is underwater

Why it matters: The MVRV Z-Score helps identify when Bitcoin is statistically overvalued or undervalued relative to its on-chain cost basis. It's particularly useful for gauging market cycles because it captures the aggregate profit/loss position of all Bitcoin holders, providing insight into when profit-taking might accelerate (high values) or when capitulation may be exhausted (low values).

Key Metrics

Key Metrics

 Key Metrics

Metrics	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	QoQ Change %	YoY Change %
 Financial Metrics							
BTC Price	63,243	93,508	82,514	107,133	114,024	6.4%	80.3%
Circulating Market Cap	1249.6 bn	1851.8 bn	1635.1 bn	2030.5 bn	2272.1 bn	6.6%	81.8%
Market Cap Dominace	51.83%	54.57%	59.20%	61.55%	56.48%	- 5.1%	4.6%
 Network Metrics							
Avg. Daily Transactions	606,779	536,859	388,573	383,190	459,608	19.9%	- 24.3%
Avg. Daily Active Addresses	460,992	514,533	496,697	503,253	487,773	- 3.1%	5.8%
Ratio of Transactions to Active Addresses	1.32x	1.04x	0.78x	0.76x	0.94x	18.1%	- 28.4%
Bitcoin Miner Revenue (USDm)	2618.2 m	3670.0 m	3861.9 m	4100.5 m	4309.3 m	5.1%	64.6%
Quarterly Transaction Fees (USDm)	59.5 m	124.8 m	51.9 m	50.5 m	56.3 m	11.4%	- 5.5%
Share (%)	2.3%	3.4%	1.3%	1.2%	3.9%	2.7%	1.7%
Quarterly Block Rewards (USDm)	2558.7 m	3545.2 m	3810.0 m	4050.0 m	4253.0 m	5.0%	66.2%
Share (%)	97.7%	96.6%	98.7%	98.8%	98.69%	- 0.1%	1.0%
Total Crypto Market Cap	2411 bn	3394 bn	2762 bn	3461 bn	4023 bn		

Sources: Blockchain.com, The Block, Artemis Terminal, Coin Metrics, Teroxx as of October 27th 2025

Basic Facts on BTC

Basic Facts on BTC

A Brief Recap

Bitcoin's Invention

Bitcoin was the first fully decentralized, peer-to-peer electronic cash system, marking a breakthrough in several fields including cryptography, computer science, and economics.

Bitcoin vs bitcoin

The word “Bitcoin” can refer to two separate but related things: Bitcoin the network (a set of rules or protocols that operates a payment network) and bitcoin the token (an asset that resides on the network).

A Fixed Supply

Bitcoin maintains a programmatic issuance schedule, contributing to its scarce supply. There is a maximum supply of 21 million bitcoin that cannot be changed without a majority consensus of the network.

Proof-of-work & Decentralization

Bitcoin's scarcity is underpinned by its decentralization and censorship-resistant characteristics, which are made possible through a consensus mechanism called proof-of-work.

Financial Analysis

Bitcoin Financial Analysis

Bitcoin Financial Analysis (Q2 2024 - Q3 2025)

Metrics	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	YoY Change %
BTC Price	62,734	63,243	93,508	82,514	107,133	114,024	80.3%
Circulating Supply	19.72 m	19.76 m	19.80 m	19.84 m	19.89 m	19.93 m	0.8%
Circulating Market Cap	1,237	1,250	1,852	1,635	2,130	2,272	81.8%
Market Cap Dominance	52.18%	51.83%	54.57%	59.20%	61.55%	56.48%	4.65%
Average Transaction Fee (USD)	9.19	1.08	2.62	1.50	1.73	1.86	73.2%
Avg. Daily Transaction Fees	4.9 m	0.6 m	1.4 m	0.6 m	0.6 m	0.5 m	- 27.1%
Total Fees	447.3 m	59.5 m	125.8 m	51.9 m	50.6 m	43.4 m	- 27.1%
Total Issuance	49,409	41,851	42,572	40,541	42,572	41,402	- 0.4%
Daily Value Settled	6.83 bn	6.34 bn	11.00 bn	8.18 bn	8.64 bn	8.95 bn	41.2%
Total Crypto Market Cap	2370 bn	2411 bn	3394 bn	2762 bn	3461 bn	3757 bn	146.0%

Sources: Blockchain.com, The Block, Artemis Terminal, Coin Metrics

Bitcoin financials (network fee dynamics) in Q3 2025 reflect a maturing market finding its equilibrium after two years of extreme volatility.

Total transaction fees for the third quarter of 2025 totaled \$43.6 million as network transaction activity continued to stabilize - a trend we are seeing since Q4 2024.

The \$43.4 million generated in Q3 2025 represents a 14.2% decline from the \$50.6 million in Q2 2025, indicating a modest cooling in fee pressure. Both quarters, however, are substantially lower than the exceptional period of Q4 2024, which generated \$126.5 million in fees. More notably, they pale in comparison to the true peak periods of 2023 Q4 (\$503.9 million) and 2024 Q2 (\$451.1 million), which represented unprecedented network congestion and fee escalation.

This suggests that the extreme network demand seen during multiple periods in 2023-2024 has subsided, and transaction fees have normalized to levels that, while modestly elevated compared to pre-2022 baselines, represent a return to the middle range of recent quarterly performance. Rather than being historically high, the three quarters of 2025 reflects a stable equilibrium where network fees have settled into a sustainable pattern following the extraordinary volatility of the previous two years

The network's security model is strengthening alongside the new valuation milestone. With the block reward at 450 BTC per day since the April 2024 halving, the daily security budget at Bitcoin's current price of around \$110,000 is approximately \$49.5 million. Daily transaction fees, which averaged \$471,000 during the recent quarter, now finance roughly 0.95% of this security expenditure. As Bitcoin maintains its position above \$110,000, the USD value of the security budget has strengthened considerably, while the growing fee market continues to build a foundation for the network's long-term economic viability, though fees currently represent a small fraction of total mining incentives.

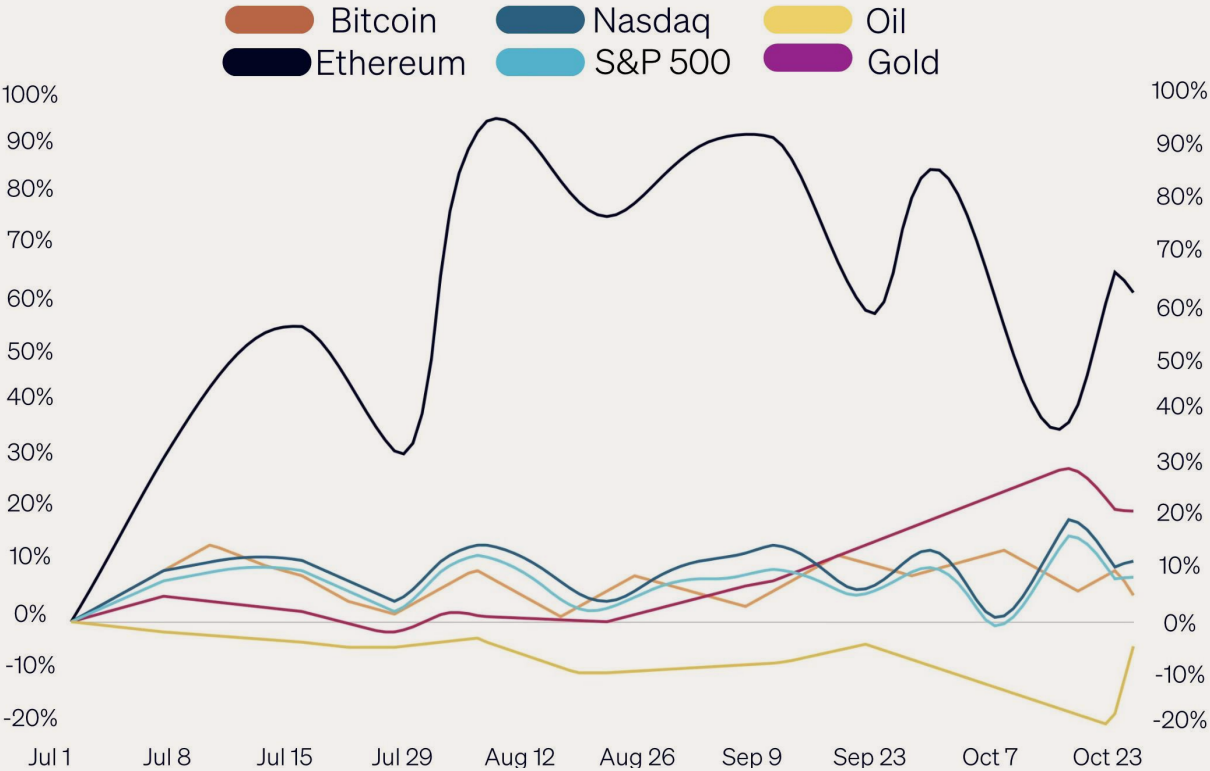
○ Bitcoin Quarterly Returns (%)

Time	Q1	Q2	Q3	Q4
2025	-11.82%	29.74%	6.31%	-2.54%
2024	68.68%	-11.92%	0.96%	47.73%
2023	71.77%	7.19%	-11.54%	56.9%
2022	-1.46%	-56.20%	-2.57%	-14.75%
2021	103.17%	-40.36%	25.01%	5.45%
2020	-10.83%	42.33%	17.97%	168.02%
2019	8.74%	159.36%	-22.86%	-13.54%
2018	-49.70%	-7.71%	3.61%	-42.16%
2017	11.89%	123.86%	80.41%	215.07%
2016	-3.06%	62.06%	-9.41%	58.17%
2015	-24.14%	7.57%	-10.05%	81.24%
2014	-37.42%	40.43%	-39.74%	-16.70%
2013	539.96%	-3.97%	40.60%	479.59%
Average	51.21%	27.11%	6.05%	79.16%
Median	-1.46%	7.57%	-0.96%	47.73%

Source: Coinglass, Teroxx

An analysis of Bitcoin's quarterly returns from 2013 to 2025 reveals that the third quarter (Q3) has historically been a period of significant volatility and inconsistent performance. The period has seen extraordinary gains, most notably in 2017 which posted a robust 80.41% return, followed by 2013 (40.60%) and 2021 (25.01%). In stark contrast, Q3 has also delivered substantial drawdowns. The worst-performing year was 2014, which recorded a sharp loss of -39.74%, along with other significant negative periods like 2019 (-22.86%). Recent performance highlights this divide, with 2025 posting a modest 6.31%. This historical inconsistency is reflected in the summary data, showing a positive average (6.05%) but a negative median (-0.96%).

 **Market Cap Comparison of BTC to Major Other Assets (ETH, NASDAQ, SP500, Gold, Oil)**
1st of July 2025 - today



Source: Yahoo Finance, Teroxx

The period from July to October 2025 displayed a dramatic divergence in asset performance. Ethereum dominated the chart, demonstrating extraordinary volatility that peaked near 95% in mid-August but also endured sharp drawdowns, ultimately ending the period with robust gains of approximately 65%. Most notably, Gold emerged as a strong and consistent performer, initiating an uptrend that accelerated sharply in October to close as the second-best performer with gains above 20%.

In stark contrast, equity indices (Nasdaq and S&P 500) and Bitcoin remained tightly clustered, moving within a low-volatility corridor and posting modest gains mostly ranging between 0% and 15%. Oil was the clear laggard, establishing a steady downtrend from the start and hitting a low of nearly -20% by mid-October.

Bitcoin in the Traditional Finance Context

Bitcoin in the Traditional Finance Context

Bitcoin's Evolution from Dominant Outlier to Maturing Asset Class

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 (YTD)
Bitcoin 1,473.76%	Bitcoin 186.08%	Bitcoin 5,537.40%	U.S. REITs 30.38%	Bitcoin 33.74%	Bitcoin 124.81%	Bitcoin 1,349.04%	U.S. Bonds 0.01%	Bitcoin 93.95%	Bitcoin 308.17%	Bitcoin 57.25%	Commodities 21.23%	Bitcoin 156.89%	Bitcoin 119.58%	Gold 47.04%
Gold 10.10%	EM Equities 18.63%	U.S. Equities 32.39%	U.S. Equities 13.69%	U.S. REITs 2.52%	Commodities 19.53%	EM Equities 37.75%	Gold (1.56%)	U.S. Equities 31.49%	Gold 25.12%	U.S. REITs 43.06%	Gold (0.28%)	U.S. Equities 26.29%	Gold 27.22%	EM Equities 28.22%
U.S. REITs 8.69%	DM Equities 17.90%	DM Equities 23.29%	U.S. Bonds 5.97%	U.S. Equities 1.38%	U.S. Equities 11.96%	DM Equities 25.62%	U.S. Equities (4.38%)	U.S. REITs 25.84%	EM Equities 18.69%	Commodities 42.60%	U.S. Bonds (13.01%)	DM Equities 18.85%	U.S. Equities 25.02%	DM Equities 25.72%
U.S. Bonds 7.84%	U.S. REITs 17.77%	U.S. REITs 2.47%	Gold (1.44%)	U.S. Bonds 0.55%	EM Equities 11.60%	U.S. Equities 21.83%	U.S. REITs (4.57%)	DM Equities 22.66%	U.S. Equities 18.40%	U.S. Equities 28.71%	DM Equities (14.01%)	U.S. REITs 13.74%	U.S. REITs 8.75%	Bitcoin 22.50%
U.S. Equities 2.11%	U.S. Equities 16.00%	U.S. Bonds (2.02%)	EM Equities (1.82%)	DM Equities (0.39%)	U.S. REITs 8.60%	Gold 13.53%	Commodities (11.18%)	EM Equities 18.88%	DM Equities 8.28%	DM Equities 11.78%	U.S. Equities (18.11%)	Gold 13.10%	EM Equities 8.05%	U.S. Equities 14.83%
Commodities (2.39%)	Gold 7.06%	EM Equities (2.27%)	DM Equities (4.48%)	Gold (10.41%)	Gold 8.14%	Commodities 6.16%	DM Equities (13.36%)	Gold 18.31%	U.S. Bonds 7.51%	U.S. Bonds (1.54%)	EM Equities (19.74%)	EM Equities 10.27%	DM Equities 4.35%	U.S. Bonds 6.13%
DM Equities (11.73%)	U.S. Bonds 4.22%	Commodities (6.55%)	Commodities (26.43%)	EM Equities (14.60%)	U.S. Bonds 2.65%	U.S. REITs 5.07%	EM Equities (14.24%)	Commodities 12.94%	Commodities (7.53%)	EM Equities (2.22%)	U.S. REITs (24.51%)	U.S. Bonds 5.53%	Commodities 2.85%	Commodities 6.07%
EM Equities (18.17%)	Commodities 4.16%	Gold (28.28%)	Bitcoin (57.74%)	Commodities (26.68%)	DM Equities 1.51%	U.S. Bonds 3.54%	Bitcoin (73.71%)	U.S. Bonds 8.72%	U.S. REITs (7.57%)	Gold (3.64%)	Bitcoin (63.91%)	Commodities (5.33%)	U.S. Bonds 1.25%	U.S. REITs 4.72%

Source: Yahoo Finance and Teroxx

Bitcoin's relationship with traditional financial markets has evolved considerably throughout 2024-2025, with a marked decoupling in Q3 2025 underscoring its transition from a dominant performance outlier to a maturing, though still distinctive, asset class.

Historical data reveals Bitcoin as the top-performing asset in 11 out of 14 complete years from 2011-2024, including extraordinary returns of 1,474% (2011), 5,537% (2013), and more recently 308% (2020), 157% (2023), and 114% (2024).

This dominance makes 2025's shift particularly noteworthy—marking only the fourth year since 2011 where Bitcoin has not led all major asset classes. As of Q3 2025, Bitcoin ranks as the fourth-best performing asset year-to-date at 8.75%, trailing Gold (47.04%), Emerging Market Equities (28.22%), and U.S. REITs (13.74%).

During 2024, Bitcoin exhibited a correlation coefficient of approximately 0.34 with the NASDAQ-100 and 0.38 with the S&P 500, suggesting moderate correlation with traditional risk assets. This represents a notable increase from 2023 levels of 0.20 and 0.19 respectively, indicating Bitcoin's transition from a largely uncorrelated asset to one with meaningful linkage to broader market sentiment.

The 2025 Gold Divergence

Bitcoin vs Gold (3 years indexed price development)



Source: Yahoo Finance, Teroxx

The relationship with gold, traditionally viewed as Bitcoin's closest analog, has shown particularly striking divergence in 2025. Gold has emerged as the year's top performer with returns of 47.04% year-to-date, dramatically outpacing Bitcoin and marking a significant role reversal from historical norms³. Gold has surged to record highs above \$4,250 per ounce as of October 20, 2025, more than doubling Bitcoin's modest 6% Q3 advance and continuing its momentum into Q4. This performance shift represents a fundamental departure from Bitcoin's typical dominance and highlights gold's distinct risk-return profile during periods of heightened macroeconomic uncertainty, credit quality concerns, and escalating U.S.-China trade tensions.

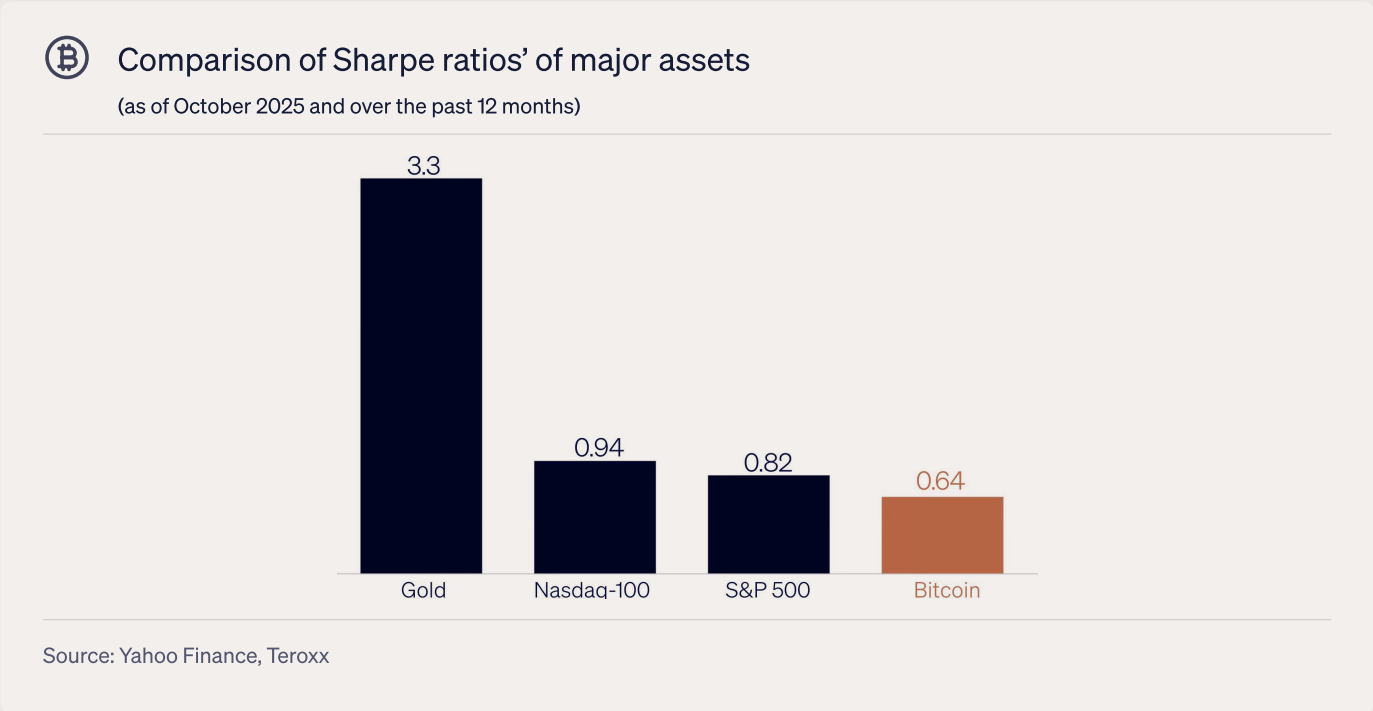
Bitcoin's annualized volatility of around 40% compared to gold's 16% over the past 3 years⁴ underscores their fundamentally different market behaviors, though Bitcoin's volatility narrowed to about 1.9x gold's level in 2025 Q1-Q3 (vs. 2.4x over the past 3 years).

The correlation between Bitcoin and gold averaged just 0.08 over the past 3 years (essentially zero correlation), indicating an extremely limited direct relationship despite conceptual similarities, with near-zero levels (0.001) specifically in Q1-Q3 2025 making them complementary portfolio components. The 2025 divergence—with gold leading all assets while Bitcoin posts more moderate gains—exemplifies this decorrelation and validates the portfolio diversification benefits of holding both assets.

³ Source: Yahoo Finance, Teroxx

⁴ Source: Yahoo Finance, Teroxx

Portfolio Construction in a Changing Landscape



From a portfolio construction perspective, Bitcoin's Sharpe ratio of approximately 0.64 over the period through Q1-Q3 2025 compares unfavorably to equity indices like the S&P 500 (around 0.82) and NASDAQ-100 (around 0.94), also trailing gold's exceptional 3.3 (!) ratio.

However, Bitcoin's maximum drawdown of 28% during recent periods underscores the importance of position sizing in institutional allocations. The historical heat map of cross-asset performance from 2011-2025 reveals no consistent pattern of assets moving together, strongly supporting the low-correlation thesis and the value of Bitcoin as a portfolio diversifier despite its 2025 underperformance relative to gold.

Leading asset managers now recommend 1-5% Bitcoin allocations for diversified portfolios, with some suggesting higher allocations for risk-tolerant investors seeking asymmetric upside, as even small inclusions have historically boosted overall Sharpe ratios in model portfolios. The 2025 performance rotation—where traditional safe-haven gold leads while Bitcoin consolidates—may actually strengthen the case for dual allocation to both digital and physical stores of value.

Macroeconomic Environment and Cross-Asset Dynamics

The October 2025 macroeconomic backdrop has created unique challenges for Bitcoin despite traditionally supportive conditions. While the Federal Reserve maintains a dovish stance with a 96% probability of a 25 basis point rate cut at the October 28-29 FOMC meeting⁵, Bitcoin has struggled to maintain momentum above \$110,000, experiencing its worst October performance since 2015 (down 5% MTD). This underperformance comes amid escalating U.S.-China trade tensions, with threats of 100% tariffs creating significant market uncertainty. October 2025 is shaping up to be Bitcoin's

⁵ Source: Kalshi (<https://kalshi.com/markets/kxfed/fed-funds-rate/fed-25oct>), Teroux

worst October since 2015, which is particularly notable given that the historical average for October sits around a positive 19.8%

With U.S. 10-year Treasury yields fluctuating between 4.2-4.8% throughout 2025, Bitcoin's inability to capture the same safe-haven flows that have propelled gold to successive records suggests a market reassessing digital versus traditional stores of value. The easing of U.S.-China tensions through upcoming high-level meetings before the APEC Summit offers potential near-term relief, as evidenced by Bitcoin's recent 5% intraday bounce to reclaim the \$110,000 level on October 20.

Bitcoin's performance during recent market events illustrates its evolving role. During the March 2025 regional banking stress, Bitcoin initially declined alongside equity markets but recovered within days, driven by renewed safe-haven demand and regulatory clarity from the Strategic Bitcoin Reserve announcement. This pattern, continuing into Q3, suggests Bitcoin is transitioning from pure risk-asset behavior toward a more nuanced position in the risk spectrum, particularly during digital asset-specific positive catalysts like ETF demand and institutional inflows. The fact that 2025 represents a rare year of Bitcoin not achieving top performance status may paradoxically signal its maturation as an asset class—moving from speculative outlier to established portfolio component with more predictable, though still attractive, risk-return characteristics.

As of October 20, 2025, the market presents a complex picture with Bitcoin trading around \$110,000 after a difficult month (down 5% MTD), while gold continues its exceptional year near \$4,255 per ounce (up 47% YTD), and the S&P 500 holds steady around 6,690 points (up 11% YTD). This divergence—with gold commanding historic premiums while Bitcoin consolidates below its earlier 2025 highs—underscores the evolving dynamics of portfolio construction in an era of heightened macroeconomic uncertainty.

Looking ahead to Q4 2025 and early 2026, Bitcoin faces critical technical levels around \$108,000-110,000 support, with potential catalysts including the Federal Reserve's anticipated rate cut on October 28-29 and continued institutional adoption through ETF flows. The stark contrast between gold's record-breaking performance and Bitcoin's October weakness may paradoxically strengthen the case for dual allocation strategies, as their near-zero correlation (0.07) in Q3 demonstrates genuine portfolio diversification benefits. This evolution from Bitcoin's historical role as a dominant but volatile outlier to a more integrated—though still distinctive—portfolio component represents a crucial development for institutional asset allocation, particularly as traditional safe-haven assets like gold reassert their relevance during periods of geopolitical tension and currency debasement concerns.

Institutional Adoption

Institutional Adoption

ETFs

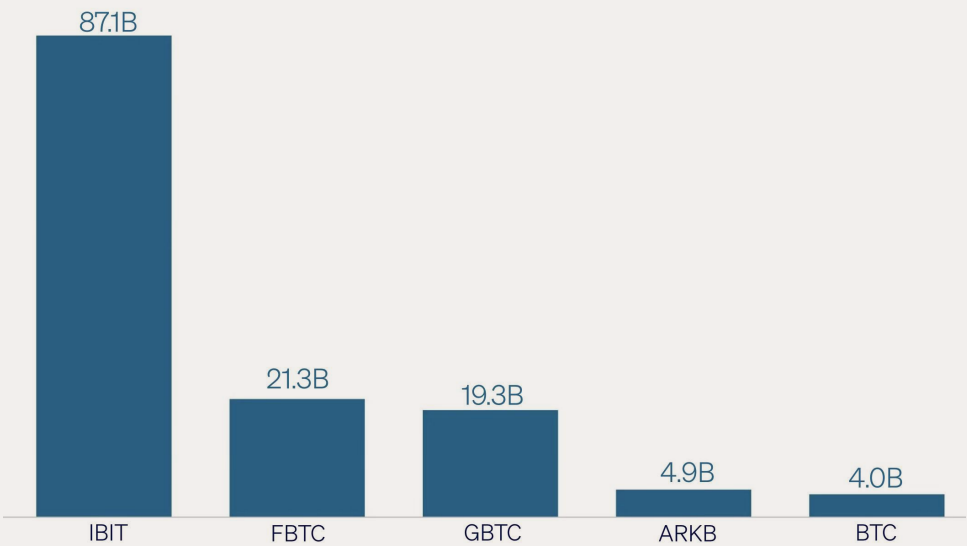
The growing institutional adoption of Bitcoin has fundamentally altered its market dynamics and correlation patterns. Bitcoin ETF assets under management exceeded \$150 billion by October 2025, providing traditional investors with regulated exposure and reducing the asset's idiosyncratic volatility.

The Securities and Exchange Commission's (SEC) approval of spot Bitcoin exchange-traded funds (ETFs) on January 10, 2024, marked a pivotal moment for digital asset adoption.

The launch of U.S.-domiciled spot Bitcoin ETFs has been the single most significant market structure event of the last 18-24 months. It has served as a robust, regulated bridge connecting the world's largest digital asset to trillions of dollars in traditional capital, fundamentally reshaping Bitcoin's identity as an asset class and altering the behavior of its market participants

By now, these ETFs, offered by major financial institutions like BlackRock, Fidelity, Ark Investments/21Shares, Invesco, and VanEck, have attracted billions in inflows, driving Bitcoin prices to multiple all-time highs in 2024 and early 2025. The approval followed a court ruling that overturned the SEC's prior rejections, particularly for Grayscale's Bitcoin Trust conversion, forcing a reevaluation of earlier denials.

📈 Comparison of US BTC Spot ETFs AUM (As of October 2025)



Source: Coinglass, Teroxx

The success of spot Bitcoin ETFs has broadened the investor base, bridging traditional finance (TradFi) and decentralized finance (DeFi). Unlike futures-based ETFs, spot ETFs require issuers to hold actual Bitcoin, increasing demand and reducing available supply on exchanges.

According to Coinglass data as of October 23rd, Bitcoin ETFs demonstrate robust market activity with \$7.1 billion in total (daily) trading volume, \$146.3 billion in combined market capitalization, and \$152.4 billion in total assets under management (AUM), reflecting substantial institutional and retail investor engagement in cryptocurrency markets through regulated exchange-traded funds.

The ETF landscape has also spurred proposals for other digital asset ETFs, including Ethereum, with filings for XRP and Solana ETFs under consideration, signaling a growing acceptance of digital assets in regulated markets. However, debates continue about the tax implications of cash versus in-kind creation/redemption models and the potential centralization risks posed by ETF custodians, with Coinbase remaining a primary custodian for most ETF applications.



Top 5 Bitcoin ETFs (US)

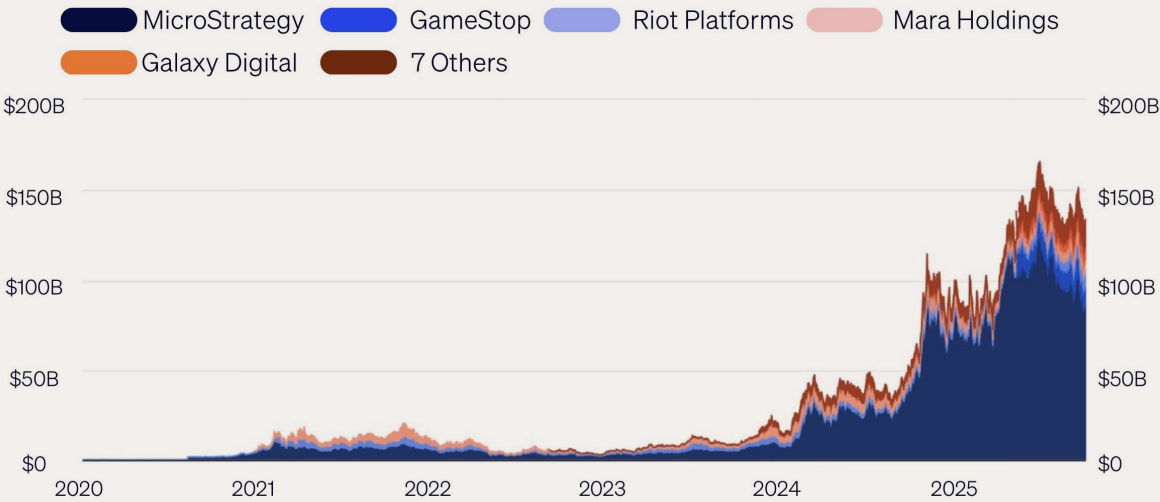
Ticker	Issuer	Inception Date	AUM (USD Billions)	Expense Ratio (%)
IBIT	BlackRock (iShares)	Jan 5, 2024	\$87.1	0.25
FBTC	Fidelity	Jan 11, 2024	\$21.3	0.25
GBTC	Grayscale	Jan 11, 2024 (as ETF)	\$19.3	1.50
ARKB	ARK Invest / 21Shares	Jan 11, 2024	\$4.9	0.21
BTC	Grayscale Bitcoin Mini Trust ETF	Jan 31, 2024	\$4.0	0.15

Source: Coinglass, Blockworks, Teroxx as of October 23rd 2025

Digital Asset Treasury Companies & Sovereign Bitcoin Purchases

Corporate treasury adoption has reached historic scale in Q3 2025, fundamentally altering Bitcoin's market dynamics through sustained institutional demand. Strategy Inc. (formerly MicroStrategy) reported a \$3.9 billion unrealized gain in Q3 2025⁷, with holdings reaching 640,031 BTC valued at \$73.21 billion on its balance sheet. Corporate entities now collectively own over 1.02 million Bitcoin (4.87% of total supply), led by Strategy (640,031 BTC), MARA Holdings (52,850 BTC), and Japan's Metaplanet (30,823 BTC)⁸. Metaplanet emerged as Asia's dominant accumulator, acquiring 5,288 BTC in Q3 alone for \$615.67 million, achieving a 497.1% Bitcoin yield for 2025.

📊 Market Caps of the Leading BTC Holding Publicly Listed Companies (Past 5 Years)



Source: The Block, Teroxx

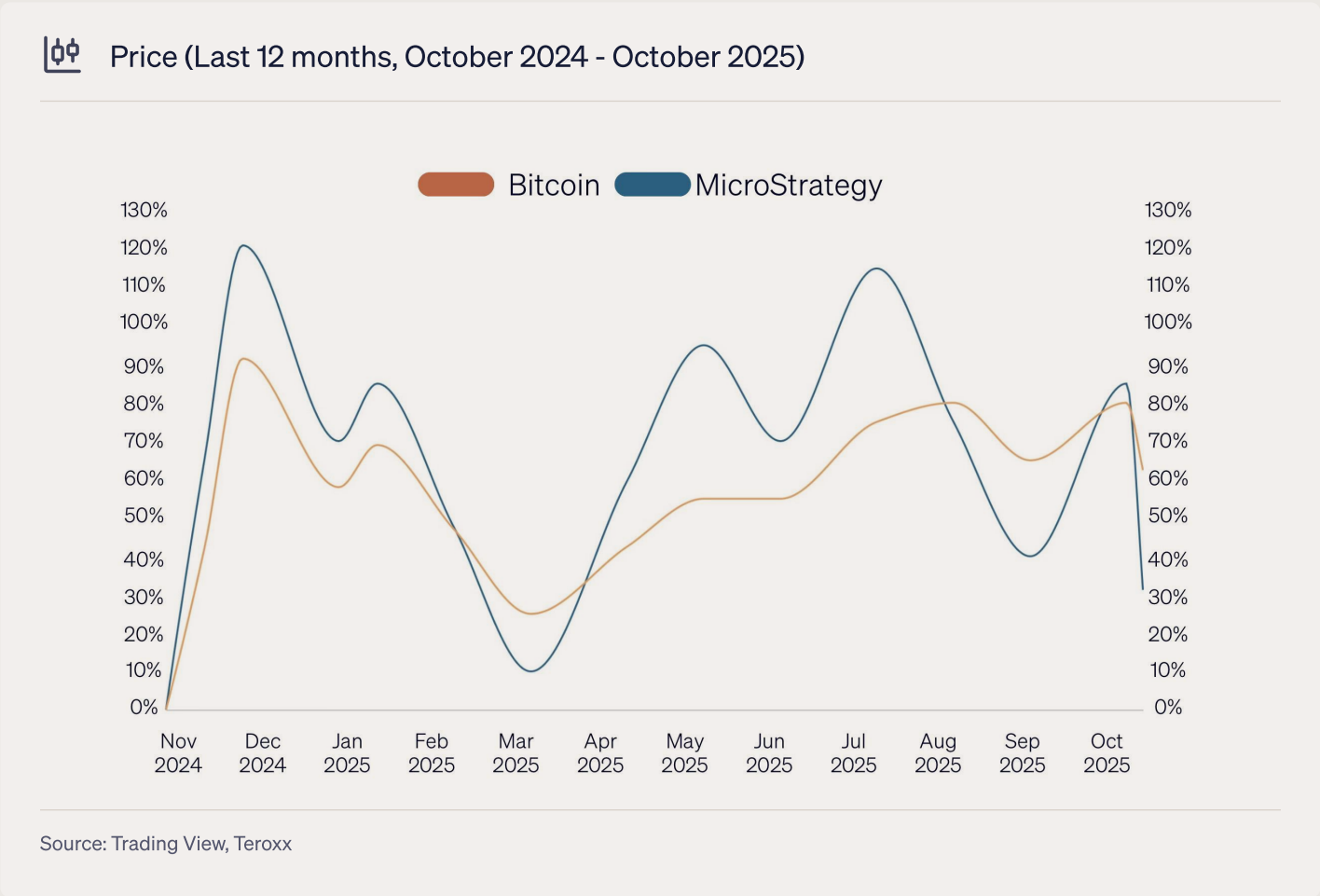
The dramatic expansion of corporate Bitcoin treasuries is evident in the exponential growth of combined market capitalizations since 2020. What began as Strategy's solitary experiment has evolved into a multi-hundred-billion-dollar ecosystem, with the stacked market cap surging from under \$2 billion in August 2020 to over \$150 billion by October 2025.

The chart reveals three distinct phases: the pioneering phase (2020-2022) dominated entirely by Strategy; the institutional adoption phase (2023-2024) as miners like MARA Holdings pivoted to treasury strategies; and the global proliferation phase (2025) with Asian entrants like Metaplanet and new vehicles like Bitcoin Standard Treasury Company rapidly scaling their holdings. The accelerating growth trajectory, particularly the vertical surge in 2024-2025, demonstrates how corporate Bitcoin accumulation has transitioned from an experimental strategy to an established corporate finance paradigm.

⁷ Source: MSTR, Yahoo Finance, Teroxx

⁸ Source: Bitcoin Magazine, Teroxx

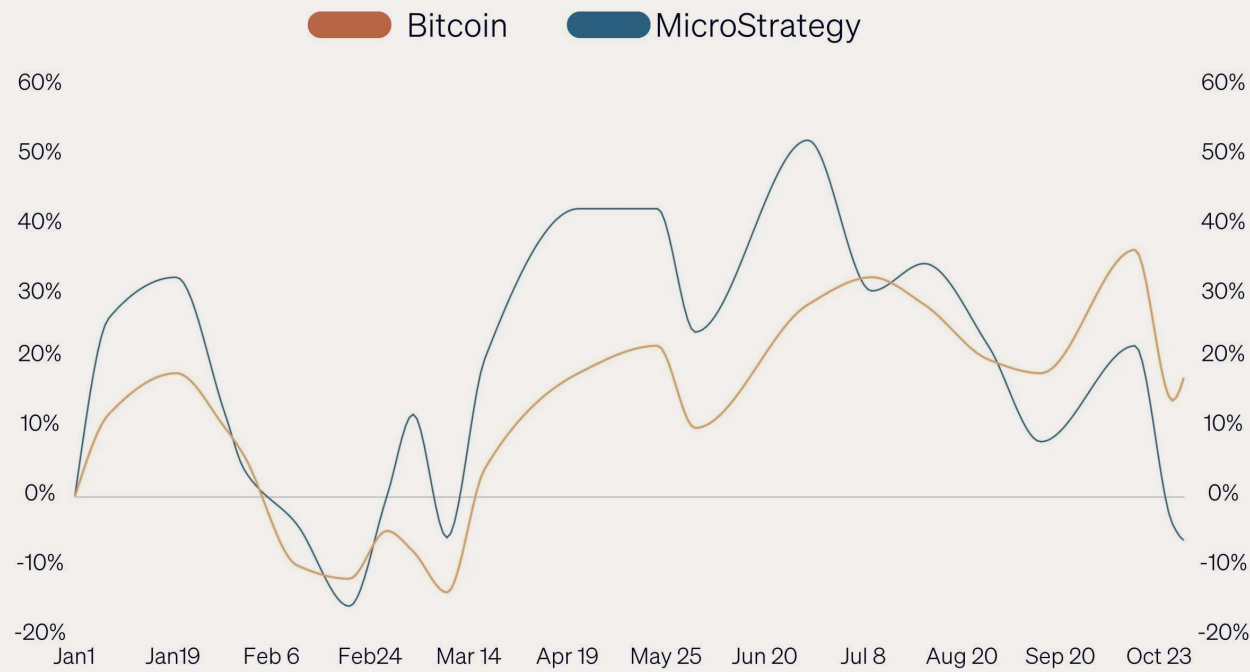
MSTR vs BTC Performance



MSTR has delivered 31% gains over the past year, underperforming Bitcoin's 62% gain, while down 6% YTD through October 23rd 2025 versus Bitcoin's 17% gain. The stock exhibits a beta of 1.30 to BTC with 77% annualized volatility compared to Bitcoin's 35%, functioning as a leveraged Bitcoin proxy. Strategy's NAV premium stood at approximately 90% as of February 2025, with the stock trading at a premium to the value of its Bitcoin holdings—reflecting investor confidence in management's capital allocation strategy.

Sovereign adoption accelerated decisively in 2025. President Trump's March 2025 executive order established the US Strategic Bitcoin Reserve, consolidating seized assets into a national reserve alongside gold, with holdings estimated between 198,012-212,000 BTC (\$18-22 billion). Governments collectively hold over 463,741 BTC (2.3% of total supply), with China holding 194,000 BTC from PlusToken seizures and Bhutan mining 12,000-13,000 BTC using hydroelectric power. Despite record Q3 corporate accumulation of 176,762 BTC, Bitcoin trades around \$108,000 in October 2025, down 9% month-to-date in what's shaping up as its worst October since 2015, though the disconnect between institutional buying and price action may signal a consolidation phase before the next leg higher.

Price (2025 YTD)



Source: Trading View, Teroxx

Network Analysis

Network Analysis



Network Analysis (Q2 2024 - Q3 2025)

Metrics	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	YoY Change %	QoQ Change %
Avg. Daily Transactions	550,430	606,779	536,859	388,573	383,190	459,608	- 24.3%	19.94%
Transaction / Active Address Ratio	1.26x	1.32x	1.04x	0.78x	0.76x	0.94x	- 28.4%	23.75%
Avg. Daily Active Addresses	436,548	460,992	514,533	496,697	503,253	478,773	5.8%	- 3.08%
Total Adresses	53.3 m	53.1 m	53.1 m	53.3 m	53.6 m	53.5 m	0.7%	- 0.28%
Avg. Daily Miner Revenue (USD)	40.8 m	28.5 m	40.1 m	42.9 m	45.0 m	43.6 m	53.0%	- 3.22%
Avg. Daily Hashrate (EH/s)	601.7	628.8	737.9	802.4	878.5	1028.5	63.6%	17.07%
Total Crypto Market Cap	2370 bn	2411 bn	3394 bn	2762 bn	3461 bn	4023 bn	166.9%	16.2%

Source: Source: Blockchain.com, The Block, Artemis Terminal, Coin Metrics, Terorxx

Bitcoin's on-chain activity in Q3 2025 reveals a network in transition: fewer but higher-value transactions, evolving user behavior, and a maturing fee market adjusting to post-inscription normality.

Average daily transactions increased +19.9% QoQ to 459,608 and decreased -24.3% YoY. Daily active addresses decreased -3.1% QoQ to 478,773, and increased +5.8% YoY.

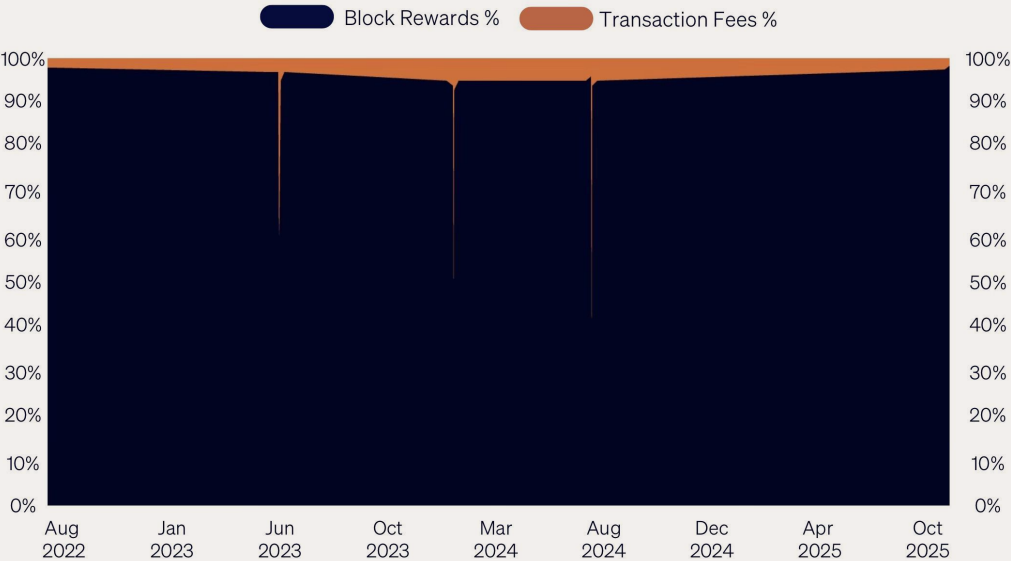
The ratio of transactions to active addresses increased from 0.76x to 0.94x QoQ (+23.8%). This indicates a significant evolution in network usage, characterized by a slightly contracting user base QoQ that is transacting more frequently, while the broader annual trend shows growth in users with reduced transaction volume. The 5.8% year-over-year increase in daily active addresses, contrasted with a 24.3% decrease in daily transactions, points to a clear behavioral shift.

Economic Activity and Settlement

The average daily value settled on the Bitcoin network reached \$8.95 billion in Q3 2025, representing a 41.2% increase year-over-year, demonstrating that while transaction counts may have declined, the economic significance of each transaction has grown substantially. The average transaction fee increased to \$1.86, up 73.2% YoY from \$1.08 in Q3 2024, though average daily transaction fees of \$0.471 million declined 27.1% from \$0.647 million in the same quarter of 2024, reflecting the normalization from the extreme fee spikes of the previous year.

Mining and Security

 Block Rewards - Past 3 Years



Source: The Blockchain, Teroxx

Trends in Transaction Fees and Revenue Composition

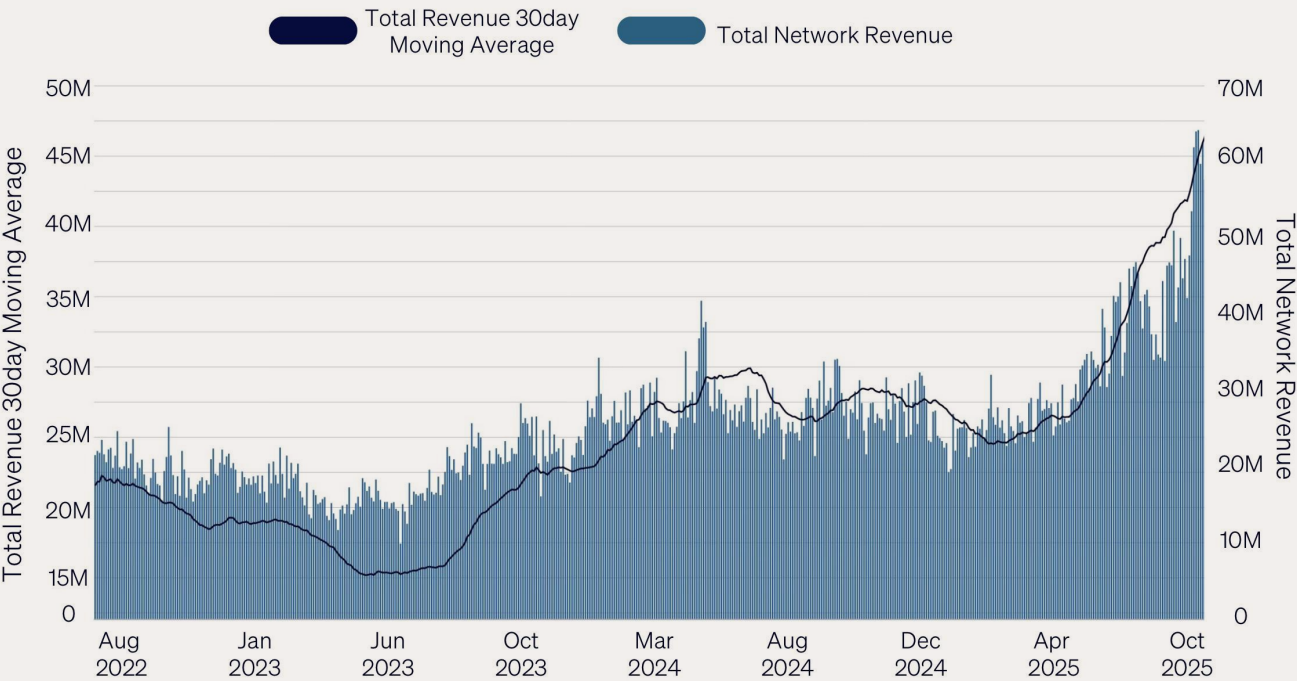
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In Q3 2024 (post-halving), transaction fees represented 2.4% of block rewards and 2.3% of total miner revenue. By Q3 2025, fees had declined further to just 0.9% of block rewards and 0.9% of total miner revenue, marking a 60% decline year-over-year and confirming that block rewards have become overwhelmingly dominant in post-halving mining economics.

Block rewards comprised approximately 97.7% of revenue in Q3 2024, rising to 99.1% in Q3 2025, reflecting miners' growing reliance on BTC issuance amid persistently low fees. Daily transaction fees fell from 10.6 BTC in Q3 2024 to just 4.1 BTC in Q3 2025, a 61% decline. This shift underscores the economic pressures miners face, including a heightened dependence on Bitcoin price increases for profitability and the need for adaptation through efficiency improvements or diversification.



Transaction Fees - Past 3 Years



Source: The Blockchain, Teroxx

Trends in Hashrate

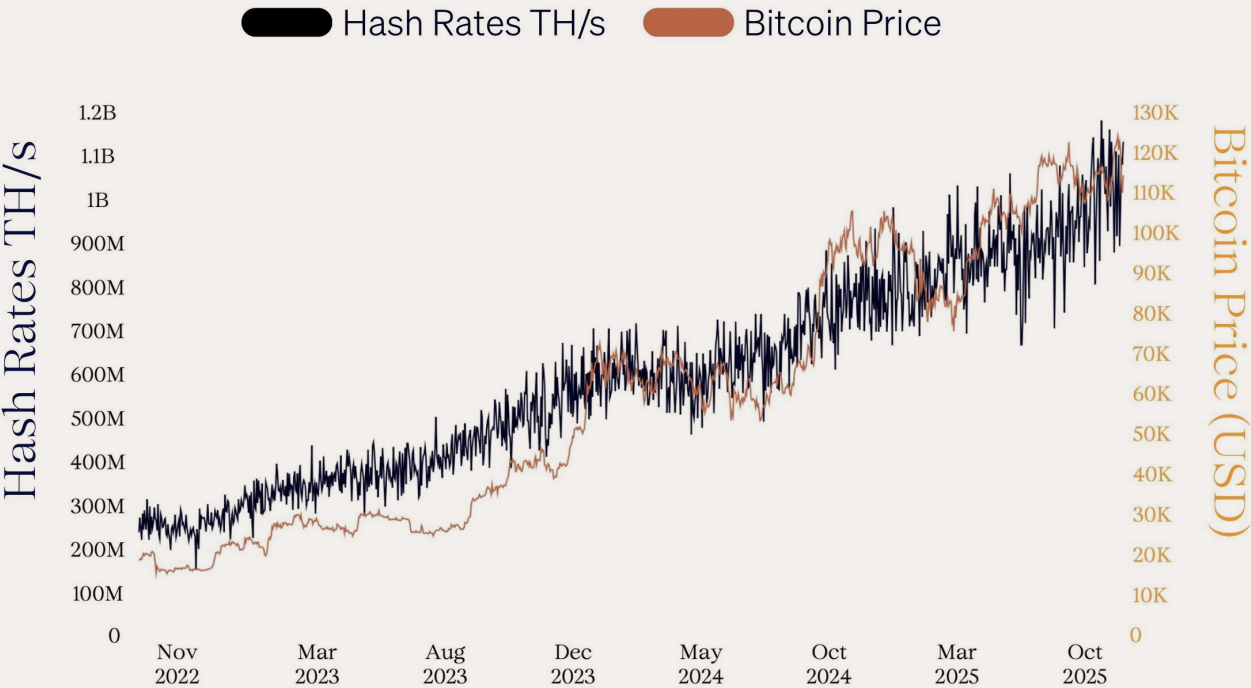
The continuous growth in Bitcoin's hashrate remains a powerful bullish signal, reflecting both soaring network security and deep miner confidence in its future profitability. Following a brief consolidation after the 2024 halving, the hashrate surged to record highs, peaking at 1,188.7 EH/s in September 2025. In the second quarter of 2025, the hashrate averaged 878.5 EH/s with peaks reaching 1,066.8 EH/s, representing a 46% increase from the same period in 2024. By Q3 2025, the average hashrate climbed further to 961.3 EH/s, marking continued expansion of network security.

This expansion has been fueled by Bitcoin's sustained price rally, which reached new all-time highs above \$124,750 in October 2025, creating a technological arms race to deploy more efficient mining hardware. The growth momentum accelerated through 2025, with the hashrate increasing 9.5% from Q1 to Q2, then surging another 9.4% from Q2 to Q3, driven by significant geographic diversification as major operations continue expanding in key regions like the United States and the Middle East, cementing an increasingly robust and globally distributed security infrastructure for the network.

Additional Context:

- Post-halving growth: 104% increase since April 2024 halving
- All-time high: 1,188.7 EH/s (September 19, 2025)
- Current hashrate: ~1,140 EH/s (October 2025)
- Q3 2025 average: 961.3 EH/s

 Hashrate Development - Past 3 Years



Source: The Blockchain, Teroxx

Closing Summary

The third quarter of 2025 represents a continuation of Bitcoin's evolution from speculative risk-asset to institutional reserve asset. While general metrics (e.g. price) suggest a period of a slowdown and stagnation - with Bitcoin ending Q3 virtually unchanged at \$111,000-112,000—deeper analysis reveals a market undergoing healthy structural transformation that has positioned it for sustained growth into Q4 and beyond.

The quarter's most significant development was the successful absorption of the remarkable 80,000 BTC sale from a Satoshi-era investor facilitated by Galaxy Digital. This influx, which in previous cycles might have triggered substantial corrections, was efficiently absorbed by institutional demand channels—particularly spot ETFs maintaining steady inflows and corporate treasuries continuing strategic accumulation. The market's ability to maintain price stability during this distribution phase demonstrates good depth and maturity of the Bitcoin market.

The decline in Bitcoin dominance from 64% to 56% and the 62% surge in the ETH/BTC ratio should not be interpreted as weakness, but rather as evidence of a broadening institutional digital asset universe - where capital rotation follows predictable patterns. This "low volatility phase of distribution" has historically preceded significant rallies, a pattern initially validated by Bitcoin's immediate surge to \$126,000 in early Q4 2025.

Corporate treasury adoption has reached significant scale, with public companies now controlling over 1.048 million Bitcoin (4.99% of total supply) according to BitcoinTreasuries.net data. Strategy Inc. leads with 640,418 BTC valued at over \$73 billion, followed by MARA Holdings' 53,250 BTC and Japan's Metaplanet's 30,823 BTC. The total market capitalization of Bitcoin-holding public companies has surged from under \$2 billion in 2020 to over \$150 billion by October 2025, marking Bitcoin's transition into an institutional asset.

US Spot BTC ETFs, now managing \$152.4 billion in AUM across 1.3 million BTC, have created persistent inflows that fundamentally alter market microstructure. BlackRock's IBIT alone controls 770,000 BTC—nearly 4% of circulating supply—representing institutional demand that didn't exist just two years ago. Combined with record network security—hashrate peaking at 1,188.7 EH/s in September 2025—and the MVRV Z-score near 2 (versus historical peaks above 7), these indicators suggest the market remains well below overheated conditions typical of cycle tops.

Q3 2025's consolidation should be viewed not as a pause in momentum but as a necessary digestion, or cooling-down period, following extraordinary institutional adoption. The combination of moderate valuations, deepening liquidity infrastructure, and record network security creates a robust foundation for continued appreciation. The immediate validation of this thesis—with Bitcoin reaching new all-time highs above \$126,000 in early Q4—confirms that the market remains structurally bullish.

As Bitcoin's market capitalization remains above \$2.2 trillion and institutional infrastructure continues maturing, the asset is transitioning from a speculative vehicle to a core portfolio allocation. The successful navigation of Q3's distribution phase without significant price degradation demonstrates that Bitcoin has achieved the market depth necessary to support its role as a global reserve asset, setting the stage for continued expansion as adoption broadens across corporate and institutional entities worldwide.

Teroux Research will continue to monitor developments, providing actionable insights for the dynamic Bitcoin and broader digital asset market.

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