



XXXI Quarterly Report

2026-Q3

**Bitcoin, crypto-assets,
and blockchain**

Presented by the Digital Gold Institute,
the Research and Development Center of **CheckSig**



Digital Gold Institute at a Glance

The Digital Gold Institute is CheckSig's research center, specializing in the crypto sector. Since its founding in 2018, it has supported financial institutions with consulting, training and research on markets, technology and regulation.

Consulting



Advisory on digital asset strategy, service design and operating models.

Technical guidance on architecture, systems integration and implementation planning.

Education



Training programs tailored to the needs of financial institutions.

Specialist courses for compliance, technology and financial advisory teams.

Research



Analysis of crypto markets, investment trends and the key factors driving risk.

Research on blockchain technology, infrastructure and industry developments.



Ferdinando Ametrano

Bitcoin maximalist
since 2014



Scientific Director, Digital Gold Institute
Chief Executive Officer, CheckSig

Finance professional

Intesa Sanpaolo – Banca IMI – MPS

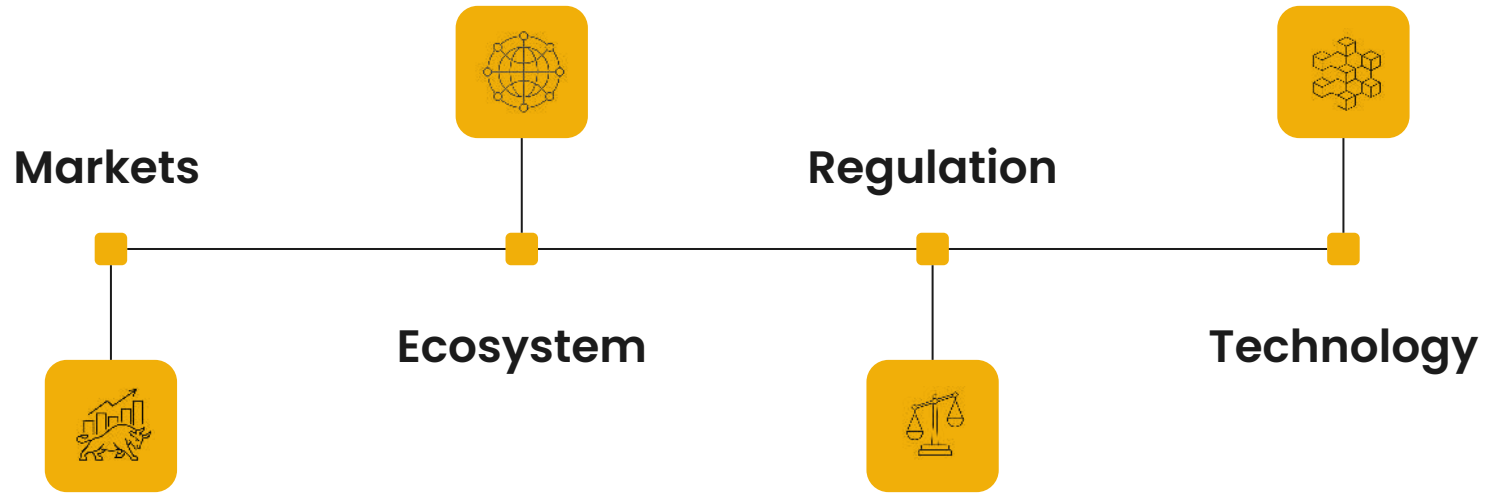
University professor

ESSEC – Milano Bicocca – Statale di Milano

Entrepreneur

CheckSig – Digital Gold Institute

Agenda



SECTION 01 OF 04

Markets



01

Markets

02

Ecosystem

03

Regulation

04

Technology

Crypto Market Capitalization Is Highly Concentrated, With Bitcoin and Ether Accounting for Around Two Thirds

Top 10 crypto-assets by market cap

Asset	Price	Market cap	Share of market cap	QoQ price change
Bitcoin (BTC)	\$83,576.13	\$1.68tn	56.67%	42.70%
Ethereum (ETH)	\$2,684.71	\$327.78bn	11.06%	71.02%
Tether (USDT)	\$0.9995	\$183.79bn	6.20%	0.08%
BNB (BNB)	\$768.80	\$102.37bn	3.46%	40.84%
XRP (XRP)	\$1.49	\$93.98bn	3.17%	43.49%
USDC (USDC)	\$0.9998	\$73.99bn	2.50%	0.04%
Solana (SOL)	\$118.04	\$69.41bn	2.34%	60.46%
TRON (TRX)	\$0.3374	\$32.05bn	1.08%	7.10%
Zcash (ZEC)	\$1,438.21	\$24.39bn	0.82%	260.17%
Figure Heloc (FIGR_HELOC)	\$1.03	\$23.99bn	0.81%	1.22%

Source: Digital Gold Institute 2026, CoinGecko

Crypto Market Cap Rebounds 40% in Q3, Approaching \$3 Trillion

Crypto market cap
tn

Market cap \$2.96tn
QoQ performance 39.58%

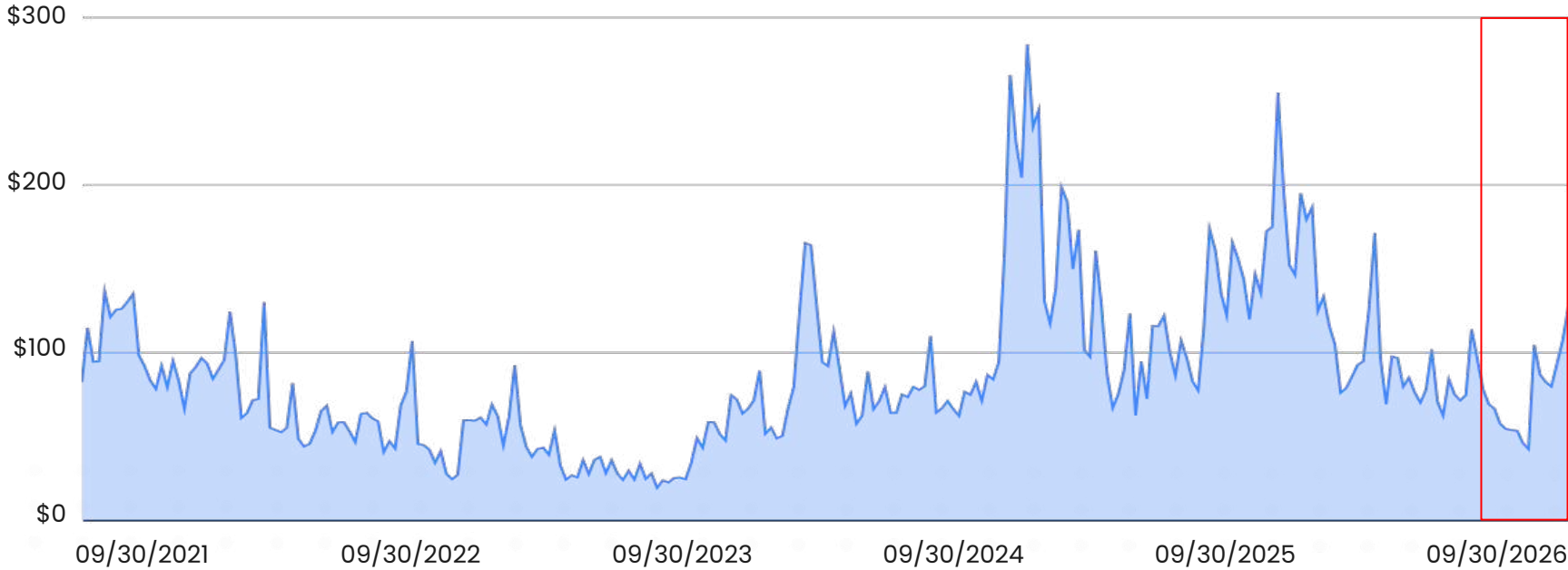


Source: Digital Gold Institute 2026, CoinGecko

Crypto Trading Volumes Ease 8% in Q3 Despite the Market Rebound

Crypto weekly average daily trading volume
bn

Quarterly volume \$6,744.88bn
QoQ change -7.60%



Source: Digital Gold Institute 2026, CoinGecko

Tether and USDC Account for More Than 85% of the Stablecoin Market

Top 10 stablecoins by market cap

Stablecoin	Market cap	Share of market cap
Tether (USDT)	\$183.79bn	60.96%
USDC (USDC)	\$73.99bn	24.54%
USDS (USDS)	\$9.92bn	3.29%
Ethena USDe (USDe)	\$4.86bn	1.61%
Dai (DAI)	\$4.57bn	1.52%
USD1 (USD1)	\$4.42bn	1.46%
Global Dollar (USDG)	\$3.17bn	1.05%
PayPal USD (PYUSD)	\$2.76bn	0.92%
Ripple USD (RLUSD)	\$2.40bn	0.80%
USDD (USDD)	\$1.53bn	0.51%

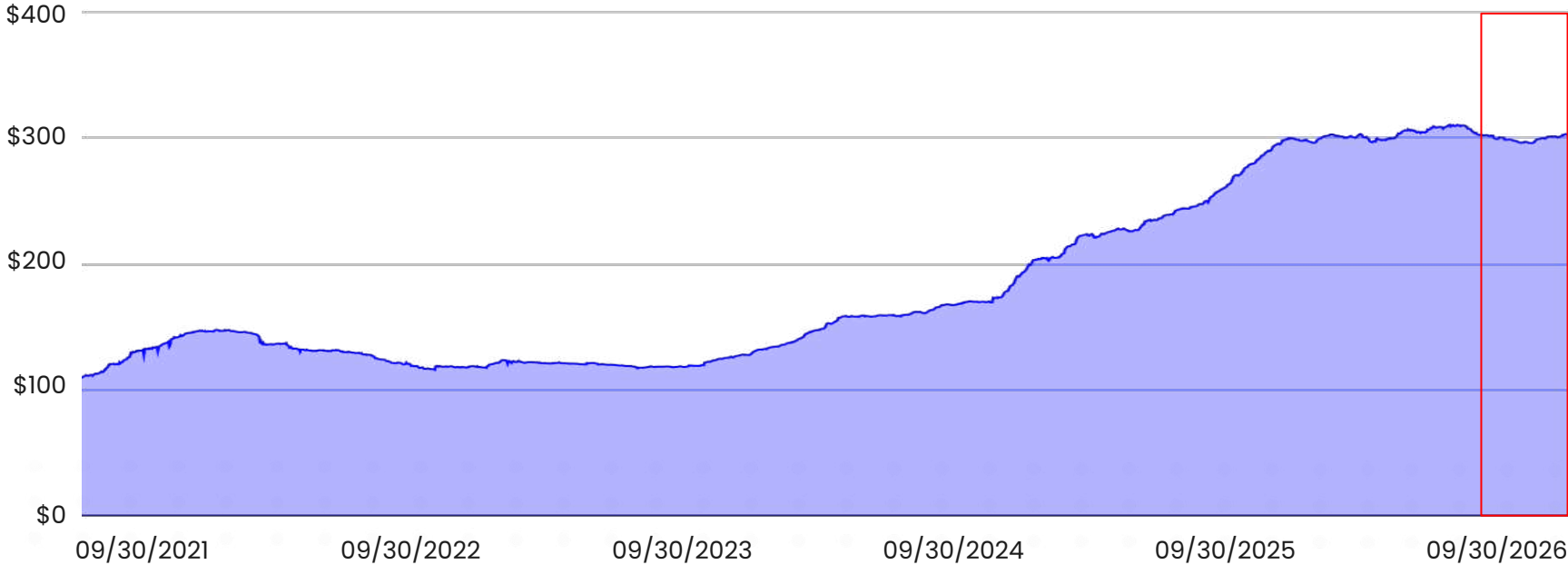
Source: Digital Gold Institute 2026, CoinGecko

Note: "Share of market cap" is calculated relative to total stablecoin market cap, not total crypto market cap

Stablecoin Supply Holds Steady Near \$300 Billion

Stablecoins market cap
bn

Market cap \$301.47bn
QoQ performance 0.58%

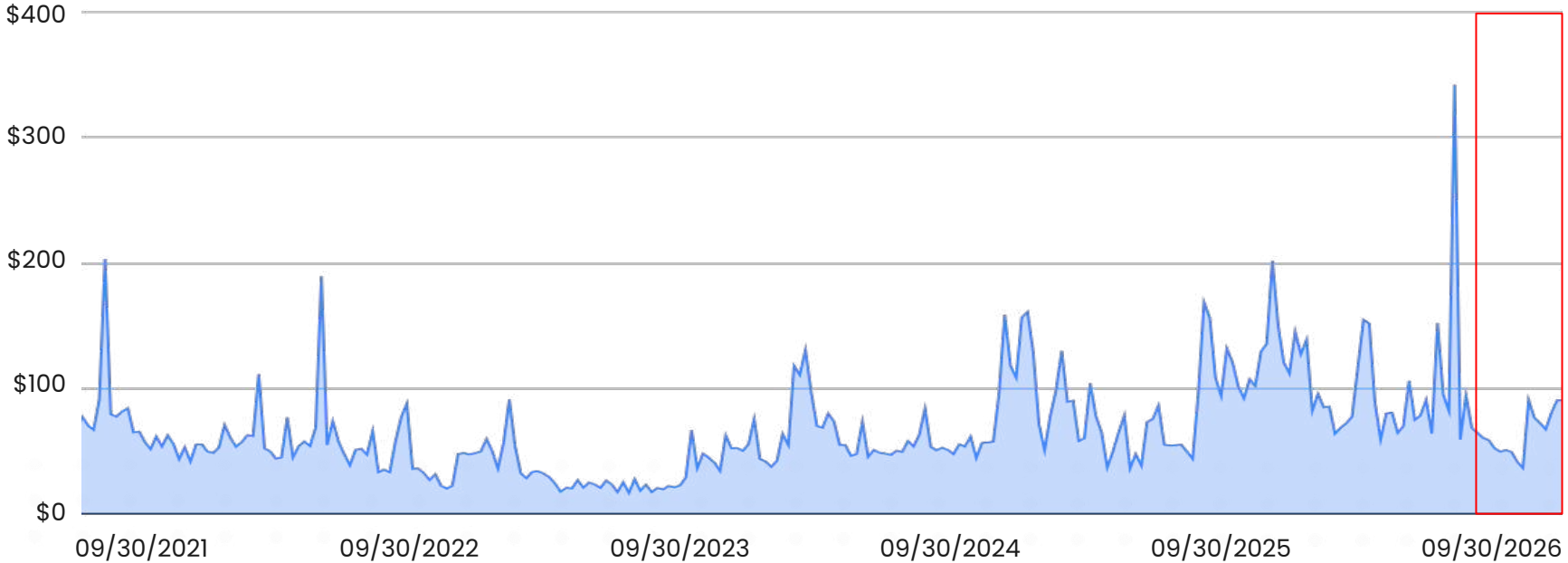


Source: Digital Gold Institute 2026, CoinGecko

Stablecoin Trading Normalizes in Q3 After an Exceptional Spike in Q2

Stablecoins weekly average daily trading volume
bn

Quarterly volume \$5,836.46bn
QoQ change -36.75%



Hyperliquid and Chainlink Lead DeFi Tokens as the Sector Rallies in Q3

Top 10 DeFi tokens by market cap

Token	Market cap	Share of market cap	QoQ price change
Hyperliquid (HYPE)	\$20.24bn	25.83%	40.06%
Chainlink (LINK)	\$10.74bn	13.71%	99.73%
Rain (RAIN)	\$8.70bn	11.10%	-22.08%
Uniswap (UNI)	\$5.51bn	7.03%	219.72%
Bitway (BTW)	\$3.59bn	4.58%	2412.92%
Pump.fun (PUMP)	\$2.75bn	3.51%	318.52%
Ethena (ENA)	\$2.67bn	3.41%	267.47%
Aave (AAVE)	\$2.46bn	3.14%	87.40%
Ondo (ONDO)	\$2.43bn	3.11%	62.58%
Aster (ASTER)	\$2.05bn	2.62%	21.60%

Note: "Share of market cap" is calculated relative to the total market cap of DeFi tokens, not total crypto market cap

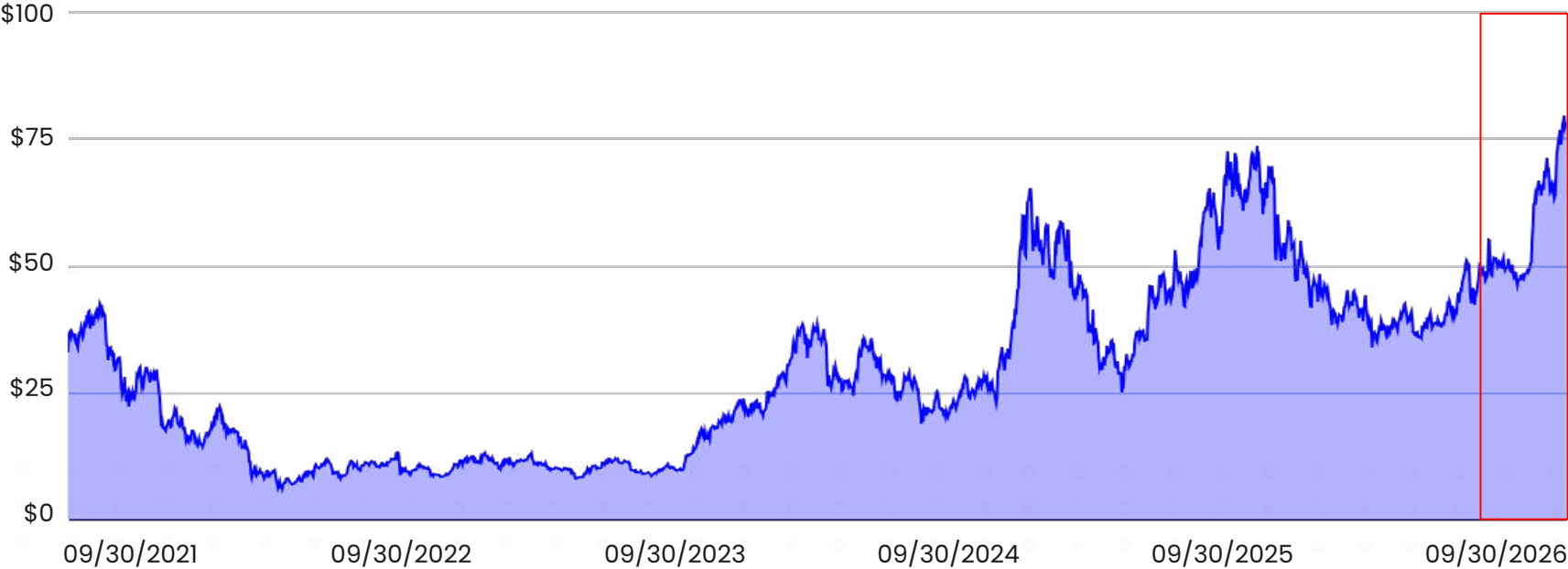
Source: Digital Gold Institute 2026, CoinGecko

DeFi tokens: tokens issued by decentralized finance protocols, excluding stablecoins, wrapped and liquid staking tokens

DeFi Token Market Cap Rises 62% in Q3 to a Five-Year High

DeFi tokens market cap
bn

Market cap \$78.35bn
QoQ performance 62.44%

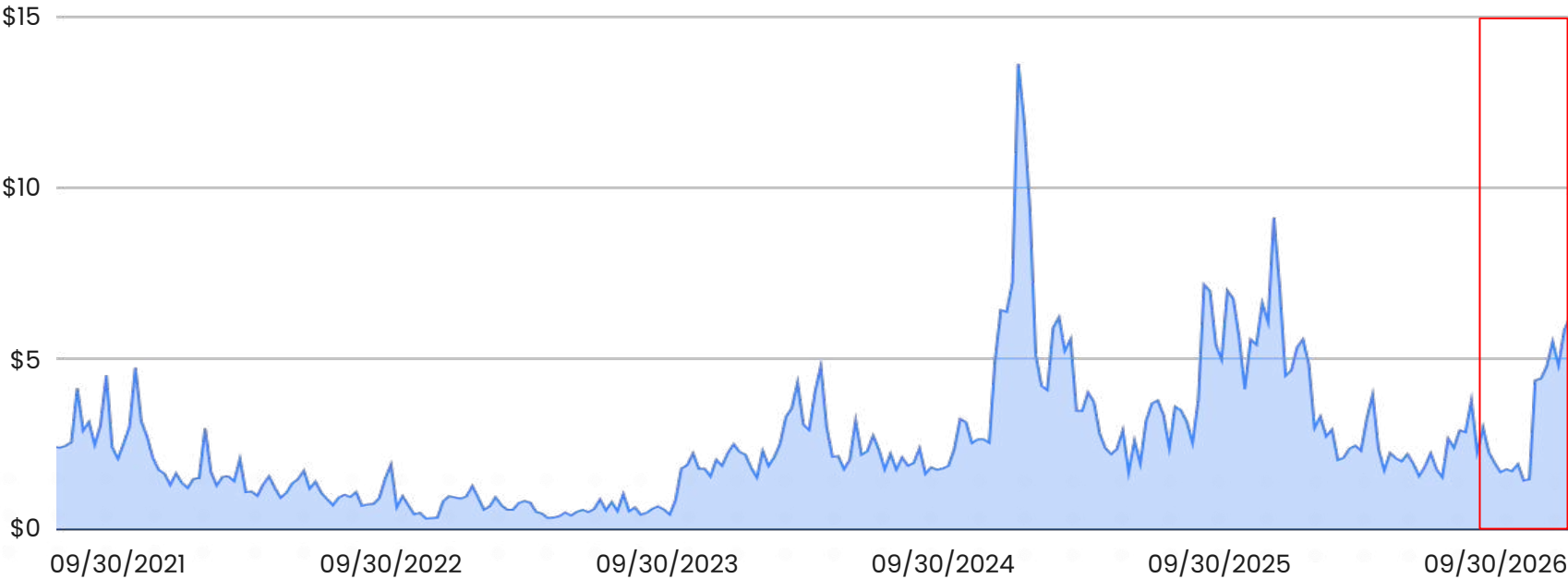


Source: Digital Gold Institute 2026, CoinGecko

DeFi Token Trading Rises 40% in Q3 Alongside the Market Rally

DeFi tokens weekly average daily trading volume
bn

Quarterly volume \$305.00bn
QoQ performance 40.46%



Source: Digital Gold Institute 2026, CoinGecko

Liquid Staking and Lending Dominate DeFi, Led by Lido and Aave

Top 10 DeFi protocols by Total Value Locked

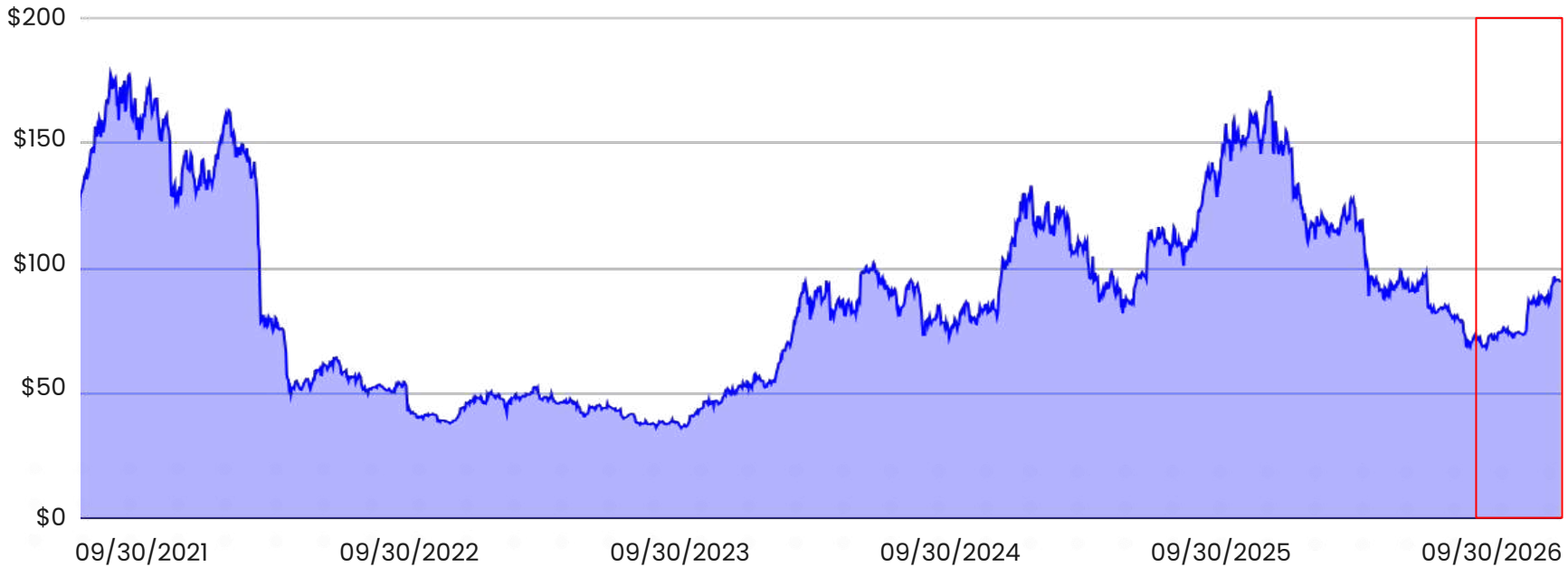
Protocol	Category	TVL	Share of TVL
Lido	Liquid Staking	\$26.42bn	27.88%
Aave V3	Lending	\$18.13bn	19.14%
SSV Network	Staking Pool	\$14.04bn	14.82%
Morpho Blue	Lending	\$10.96bn	11.57%
Binance staked ETH	Liquid Staking	\$10.00bn	10.56%
EigenCloud	Restaking	\$7.03bn	7.42%
Sky Lending	CDP	\$5.82bn	6.14%
SparkLend	Lending	\$5.63bn	5.94%
ether.fi Stake	Liquid Staking	\$5.18bn	5.46%
Ethena USDe	Basis Trading	\$4.86bn	5.13%

DeFi Total Value Locked Rises 39% in Q3, Lifted by Ether's Rally

Total value locked in DeFi protocols

bn

TVL \$94.76bn
QoQ change 39.00%



Source: Digital Gold Institute 2026, DefiLlama

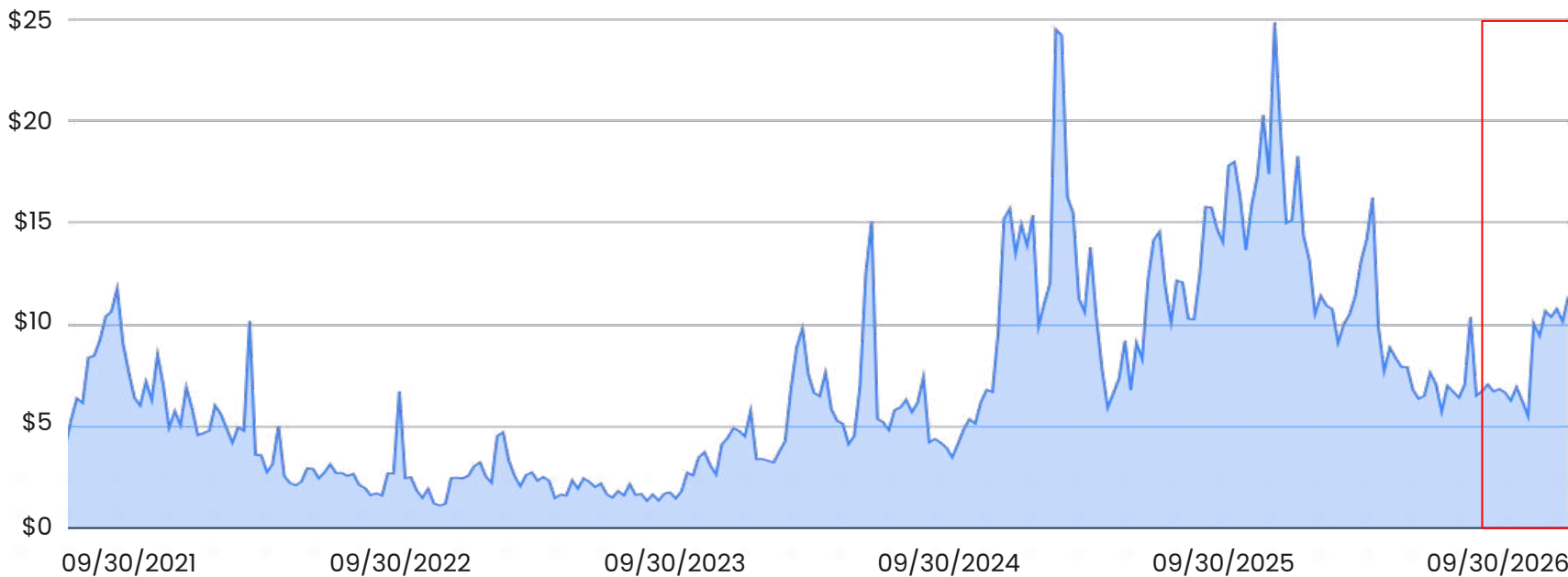
Decentralized Exchange Volumes Rise 20% in Q3

DEX weekly average daily trading volume

bn

Quarterly volume \$764.52bn

QoQ performance 20.06%



Source: Digital Gold Institute 2026, DefiLlama

DEX (decentralized exchange): a platform where users trade directly from their own wallets through smart contracts. Spot volume only, derivatives excluded

Figure Heloc Leads Tokenized Assets, Followed by Tokenized Gold and Treasury Funds

Top 10 tokenized assets by market cap

Asset	Category	Market cap	Share of market cap
Figure Heloc (FIGR_HELOC)	Private credit	\$23.99bn	57.75%
Tether Gold (XAUT)	Precious metals	\$3.36bn	8.09%
Circle USYC (USYC)	Treasuries	\$2.41bn	5.79%
Ondo US Dollar Yield (USDY)	Treasuries	\$2.28bn	5.48%
BlackRock USD Institutional Digital Liquidity Fund (BUIDL)	Treasuries	\$2.26bn	5.45%
PAX Gold (PAXG)	Precious metals	\$1.81bn	4.36%
Invesco Short Duration US Government Securities Fund (USTB)	Treasuries	\$0.75bn	1.82%
Spiko EU T-Bills Money Market Fund (EUTBL)	Treasuries	\$0.70bn	1.67%
Kinesis Gold (KAU)	Precious metals	\$0.53bn	1.29%
Janus Henderson Anemoy Treasury Fund (JTRSY)	Treasuries	\$0.33bn	0.78%

Note: "Share of market cap" is calculated relative to the total market cap of tokenized assets, not total crypto market cap

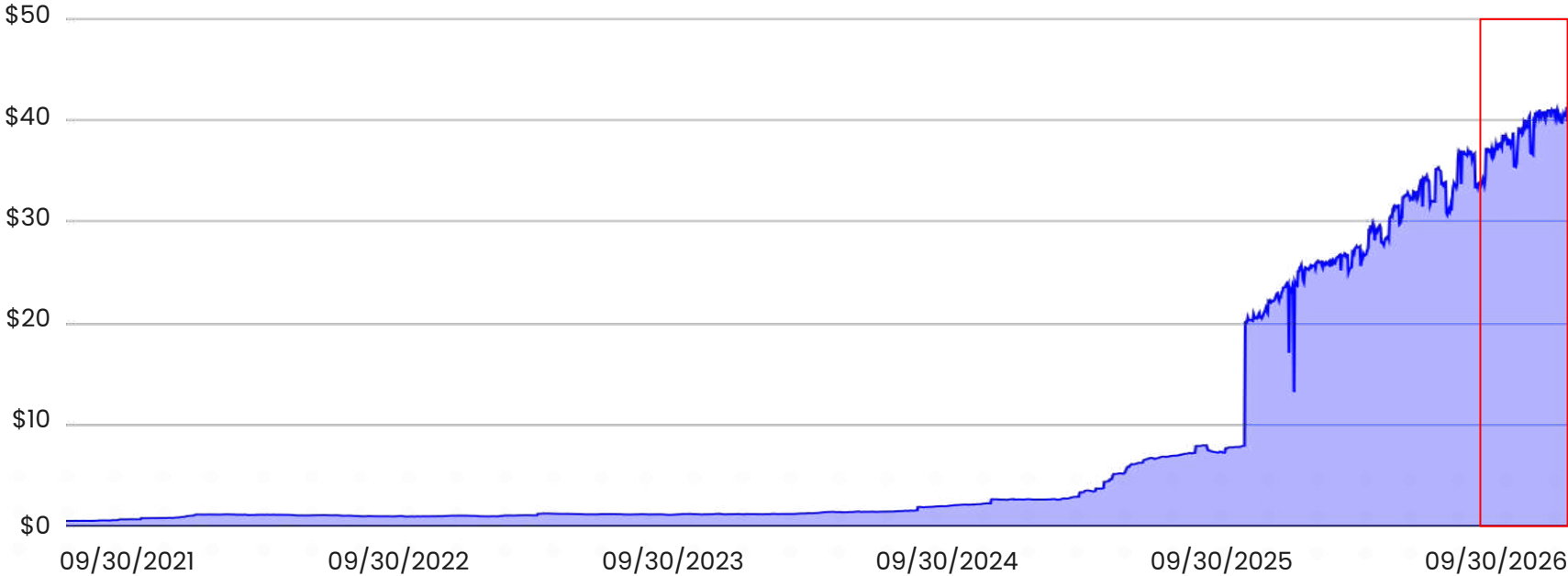
Source: Digital Gold Institute 2026, CoinGecko

Tokenized assets: traditional assets, such as loans, bonds or gold, represented as tokens on a blockchain. Stablecoins excluded

Tokenized Assets Grow 13% in Q3 to a Near-Record \$42 Billion

Tokenized assets market cap
bn

Market cap \$41.55bn
QoQ performance 13.07%



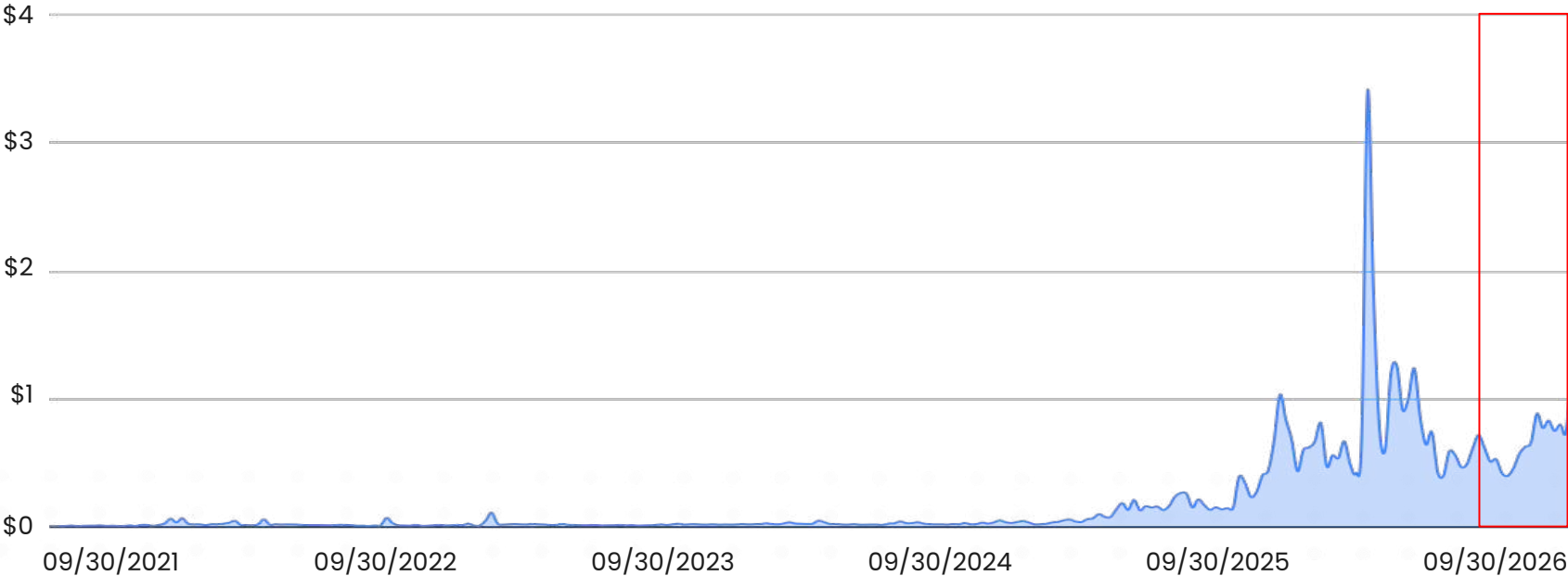
Source: Digital Gold Institute 2026, CoinGecko

Note: the jump in late 2025 reflects the inclusion of Figure HELOC in CoinGecko data, not market growth

Tokenized Asset Trading Rises 16% in Q3, Though Activity Remains Limited

Tokenized assets weekly average daily trading volume
bn

Quarterly volume \$61.00bn
QoQ performance 15.88%



Source: Digital Gold Institute 2026, CoinGecko

Despite a Pause in 2025, Bitcoin Has Led the Asset Class Ranking in 10 of the Last 14 Years

Multi-asset yearly performance ranking

BTC historical performance on log scale

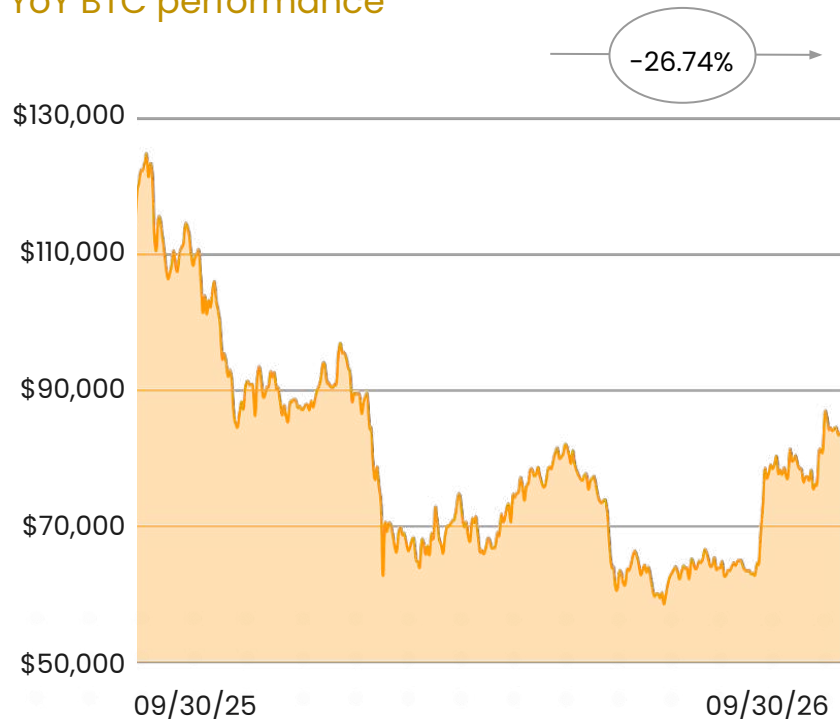
	Top Performer	Second Best	Third Best
2012	Bitcoin (217.9%)	MSCI EM (18.6%)	Russell 2000 (16.4%)
2013	Bitcoin (5428.4%)	Russell 2000 (38.8%)	S&P 500 (32.4%)
2014	REITs (7.4%)	Infrastructure (7.4%)	Equities (4.2%)
2015	Bitcoin (36.2%)	REITs (0.1%)	Small Caps (-1.0%)
2016	Bitcoin (120.3%)	High Yield (14.3%)	Commodities (11.8%)
2017	Bitcoin (1403.2%)	Equities (24.0%)	Small Caps (23.8%)
2018	US Treasuries (-0.4%)	Gold (-0.9%)	IG Bonds (-1.2%)
2019	Bitcoin (94.8%)	Equities (26.6%)	Small Caps (24.7%)
2020	Bitcoin (305.1%)	Gold (24.6%)	Small Caps (16.3%)
2021	Bitcoin (59.8%)	REITs (27.2%)	Commodities (27.1%)
2022	Commodities (16.1%)	Gold (0.4%)	Infrastructure (-4.7%)
2023	Bitcoin (152.9%)	Equities (22.2%)	Small Caps (16.8%)
2024	Bitcoin (120.8%)	Gold (27.2%)	Large Caps (23.3%)
2025	Silver (162.9%)	Gold (67.2%)	Large Caps (16.8%)



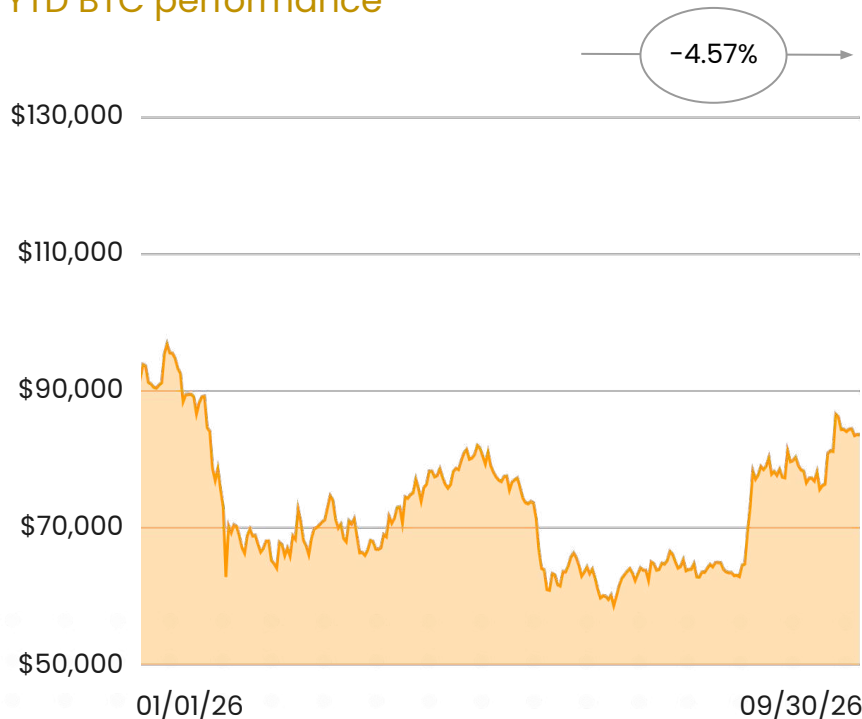
Source: Digital Gold Institute 2026, WisdomTree, CoinGecko

Bitcoin Rebounds in Q3 but Remains Negative Both Year to Date and Year on Year

YoY BTC performance

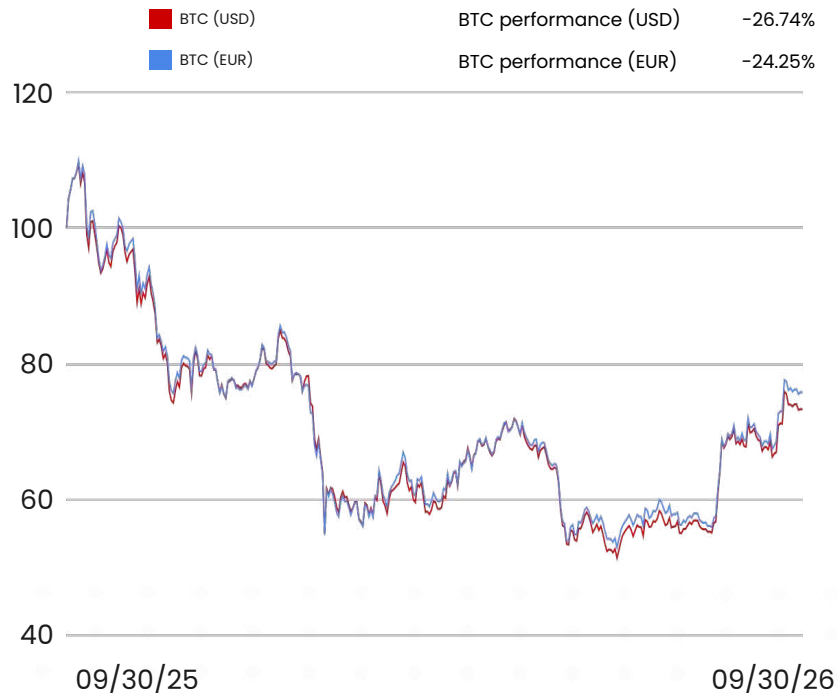


YTD BTC performance

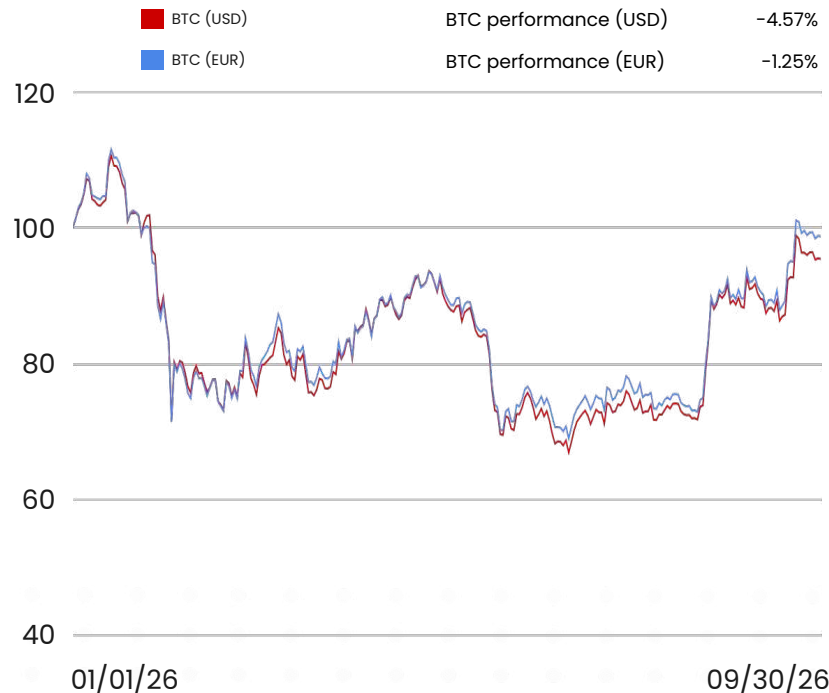


A Weaker Euro Cushioned Bitcoin's Losses for European Investors

YoY Bitcoin performance in USD and EUR

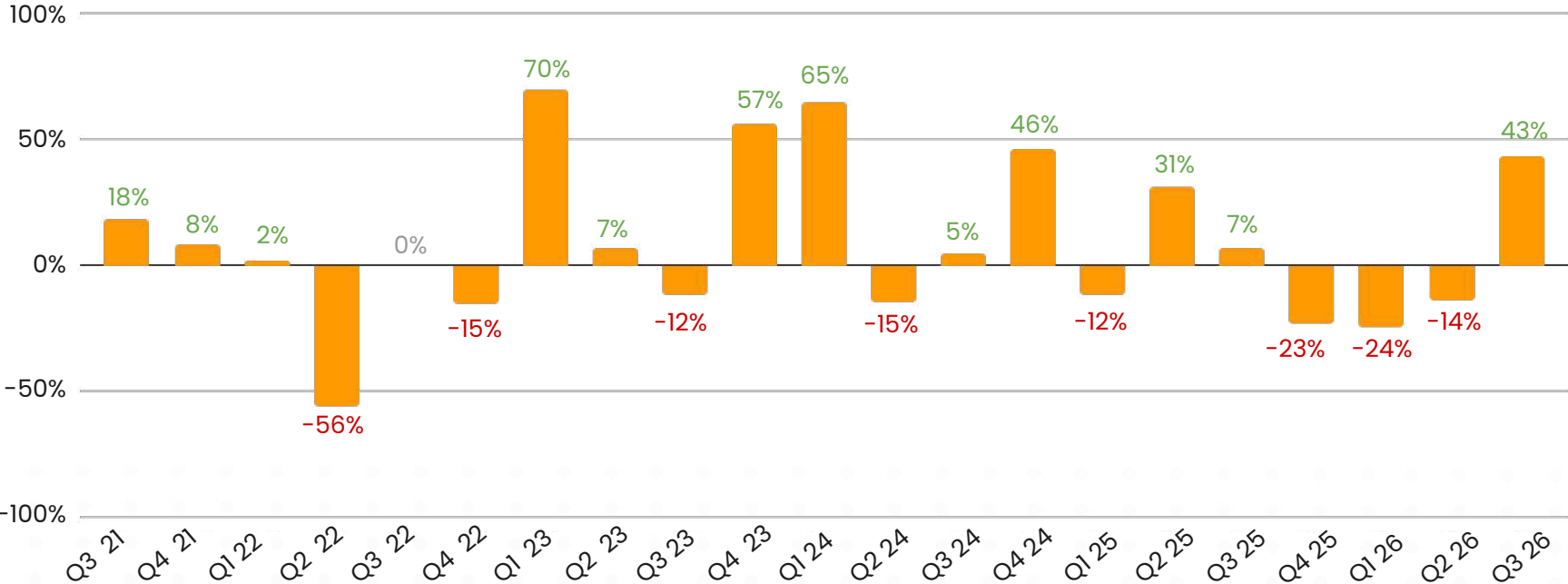


YTD Bitcoin performance in USD and EUR



Bitcoin Gains 43% in Q3, Ending Three Consecutive Quarters of Losses

BTC quarterly performance



Source: Digital Gold Institute 2026, CoinGecko

Bitcoin Dominance Holds Near 60%, Below Its 2025 Peak

Bitcoin dominance

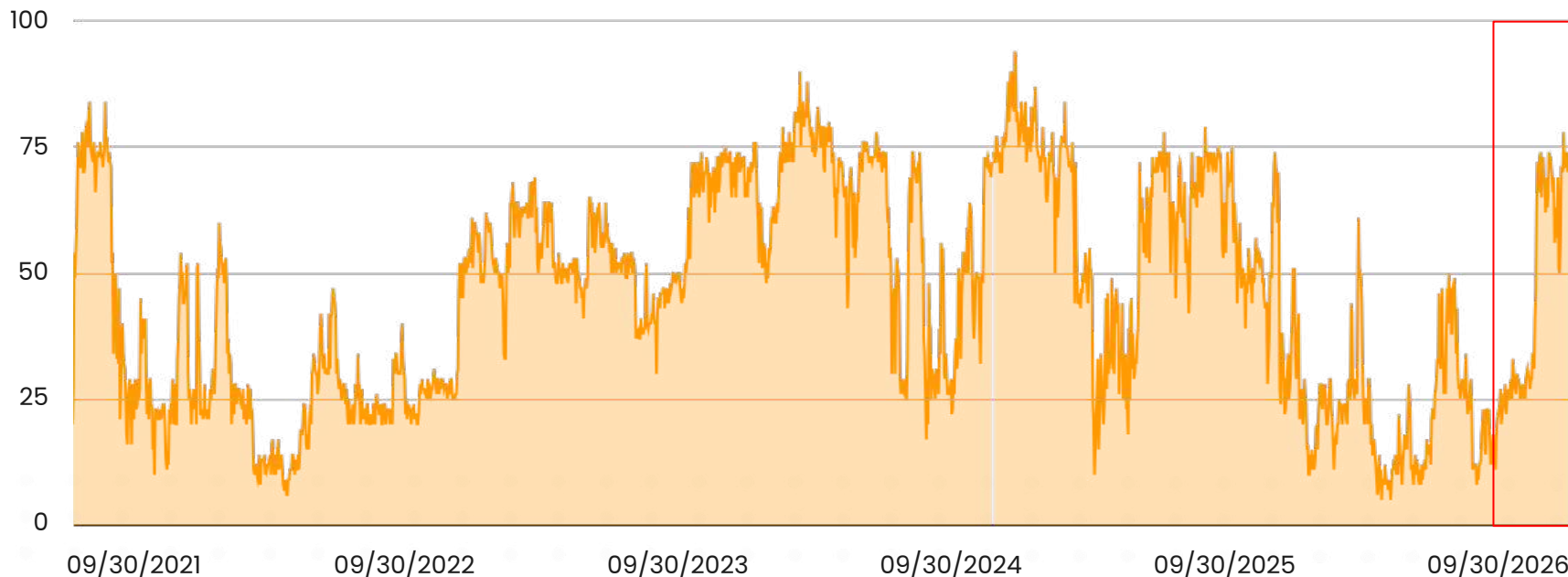


Source: Digital Gold Institute 2026, CoinGecko

Bitcoin Dominance: the share of total crypto market capitalization represented by Bitcoin

Bitcoin Sentiment Swings From Extreme Fear to Greed in Q3

Bitcoin Fear & Greed index

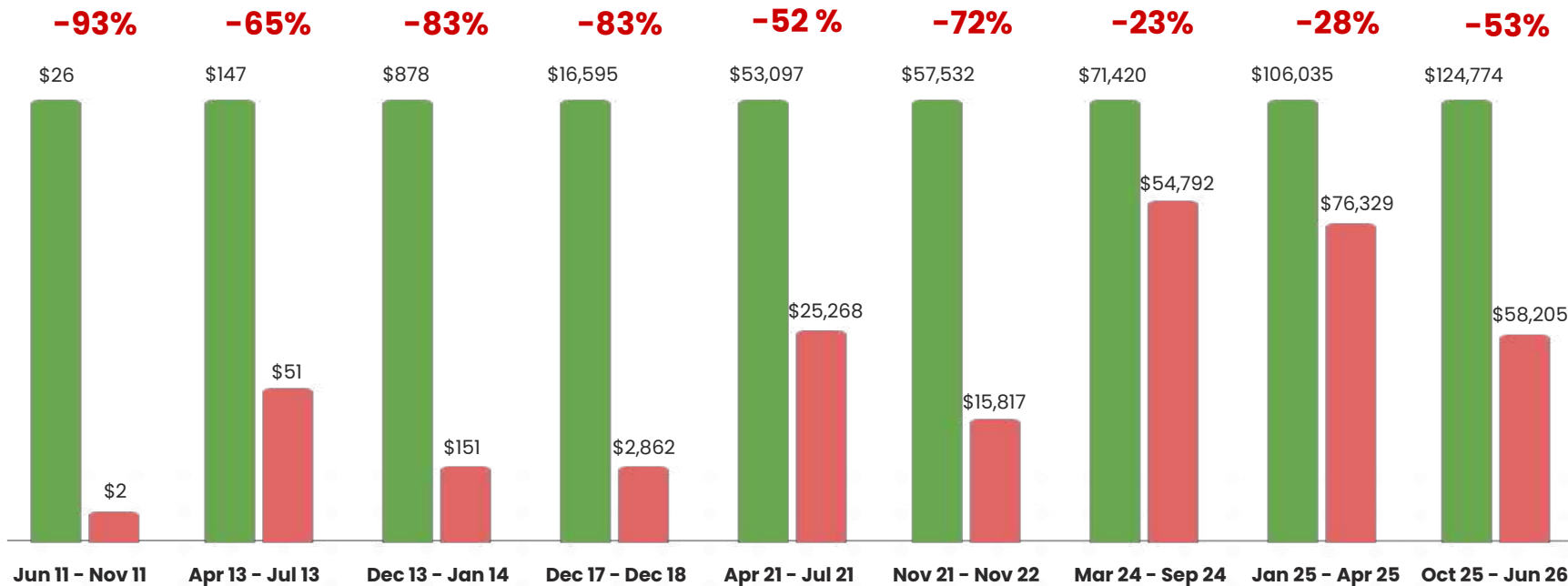


Source: Digital Gold Institute 2026, Alternative.me

Fear & Greed Index: a 0 to 100 indicator of investor sentiment based on Bitcoin data, where 0 signals extreme fear and 100 extreme greed

Bitcoin's Latest Correction Reached 53%, Well Short of Past Bear Market Extremes

Bitcoin drawdowns



Source: Digital Gold Institute 2026, CoinGecko

Drawdown: the decline of an asset from its highest value to its lowest point

Bitcoin's Q3 Recovery Narrows Its Drawdown, While the Price Remains Below Its Peak

BTC price vs. BTC drawdown from ATH

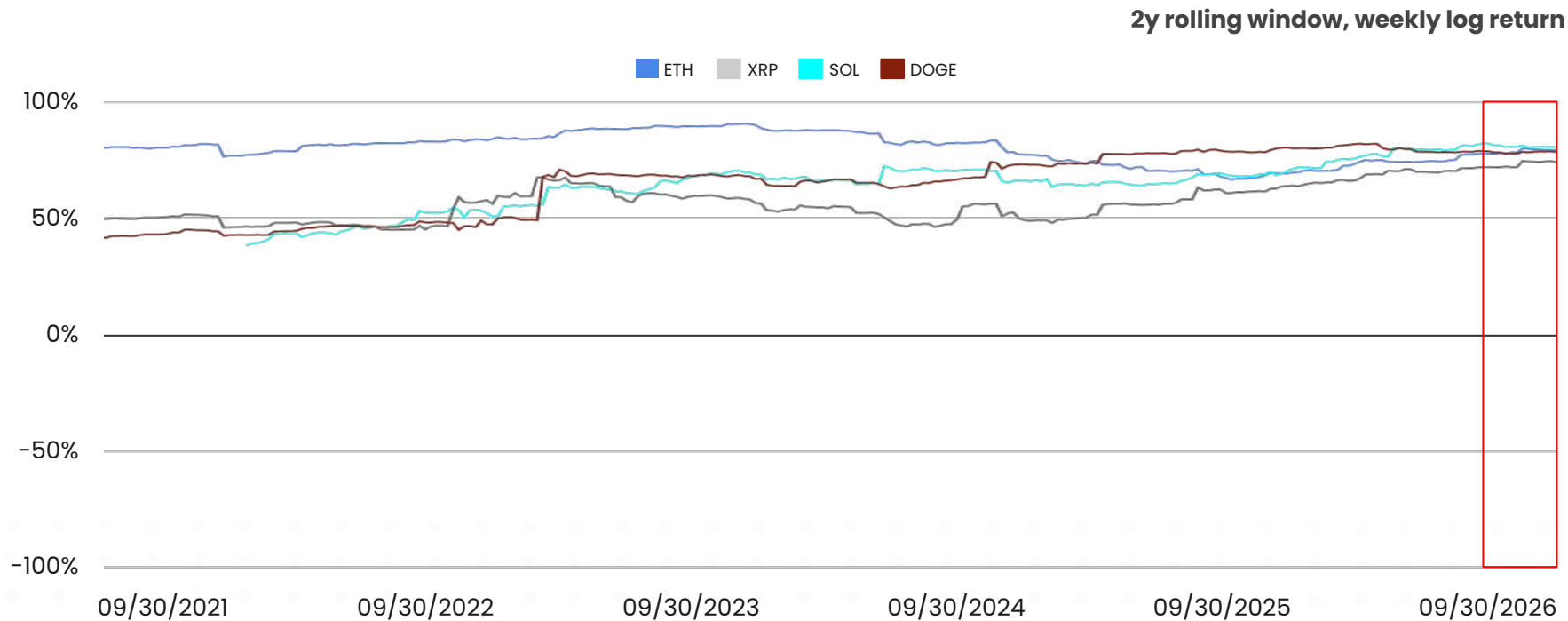


Source: Digital Gold Institute 2026, CoinGecko

Drawdown from ATH: the decline of Bitcoin's price from its all time high

Correlations with Bitcoin Stay High Across Major Crypto Assets, Limiting Diversification Benefits

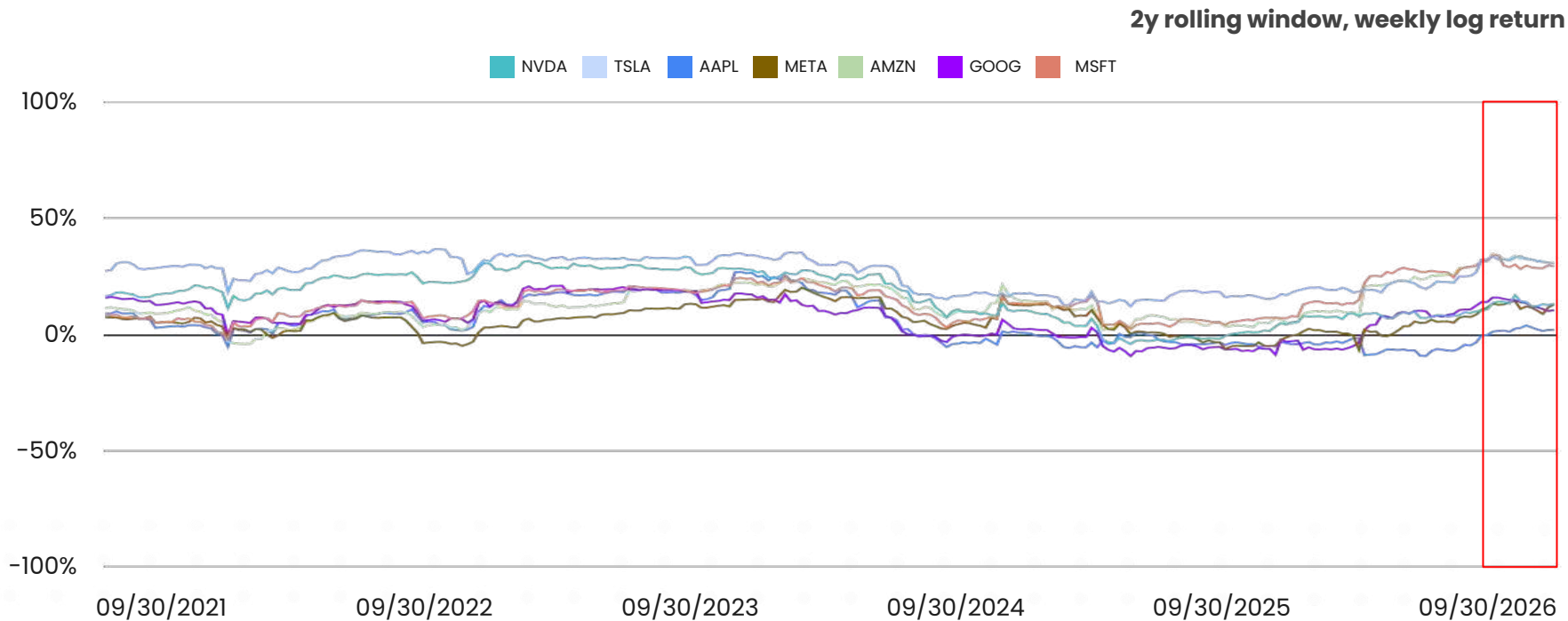
Major coins | BTC correlation



Source: Digital Gold Institute 2026, CoinGecko

Low Correlation with Tech Stocks Confirms Bitcoin's Distinct Market Profile

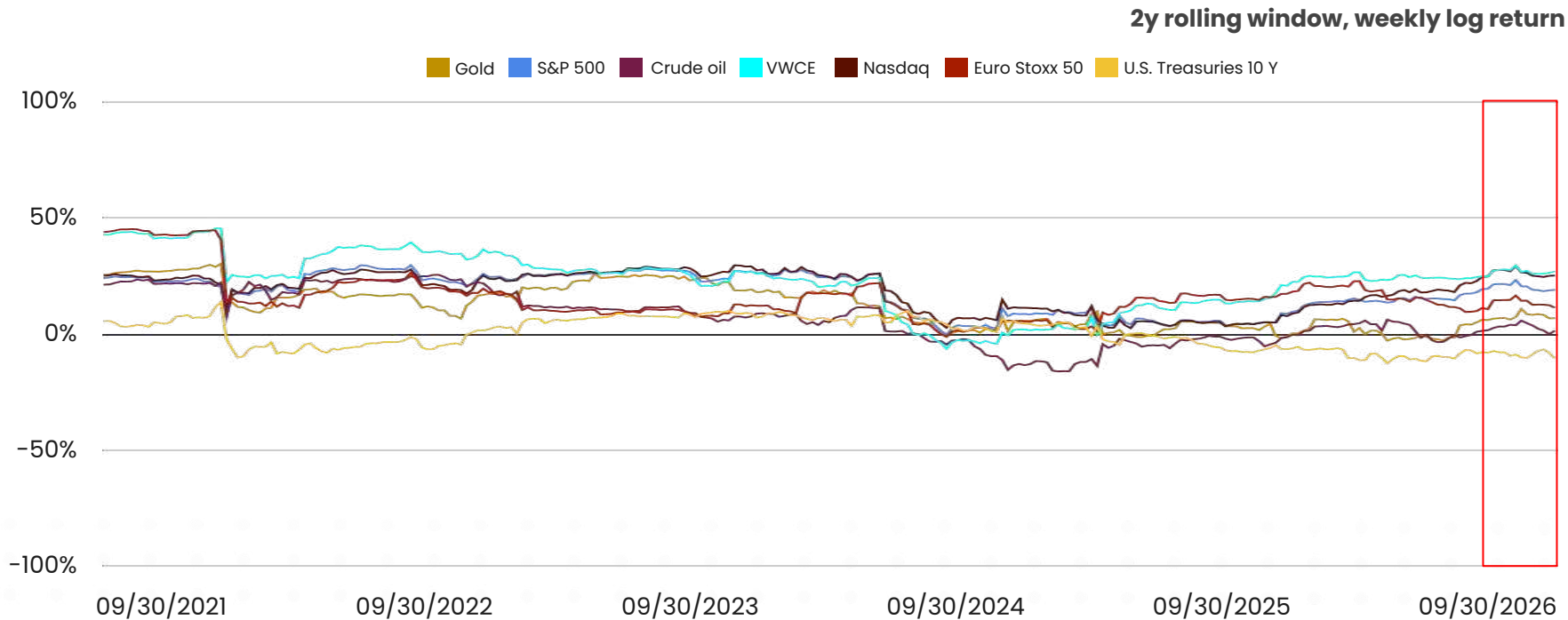
MAG 7 | BTC correlation



Source: Digital Gold Institute 2026, CoinGecko, Yahoo Finance

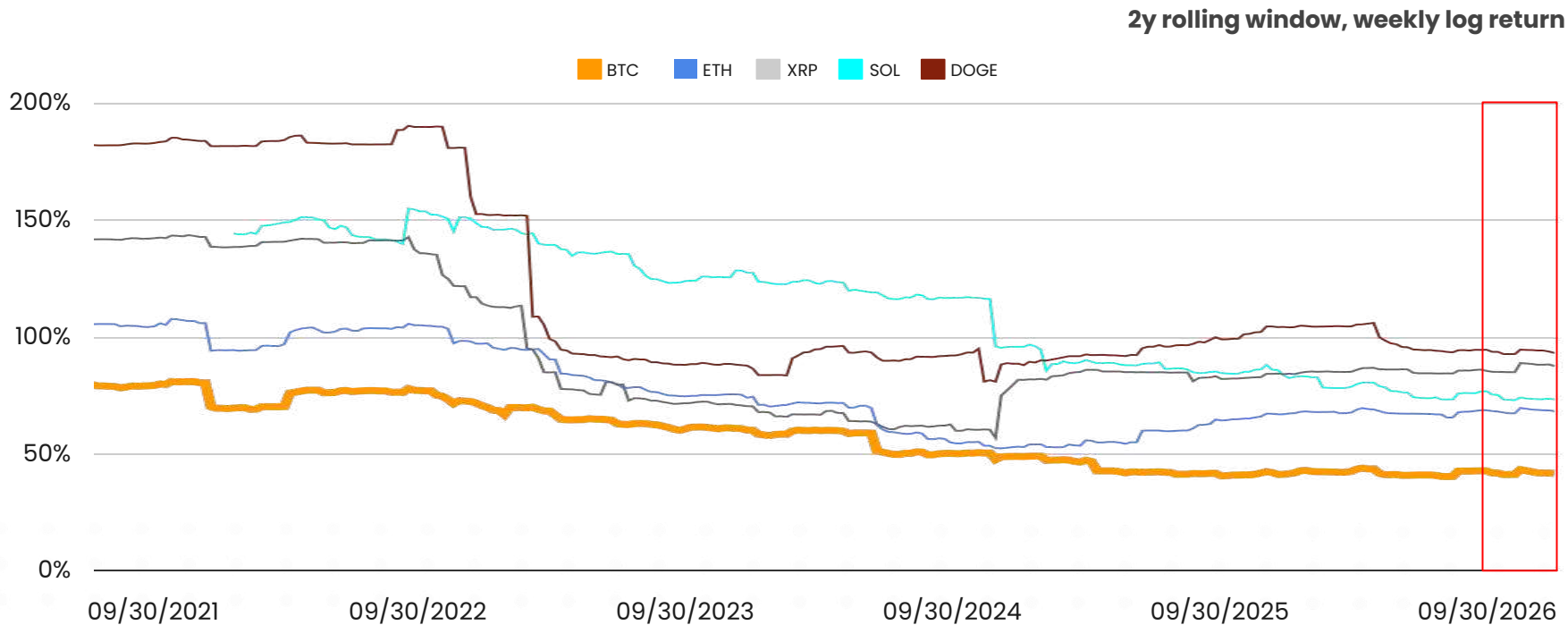
Bitcoin's Correlations with Traditional Assets Remain Low, Preserving Its Diversification Potential

Major traditional assets | BTC correlation



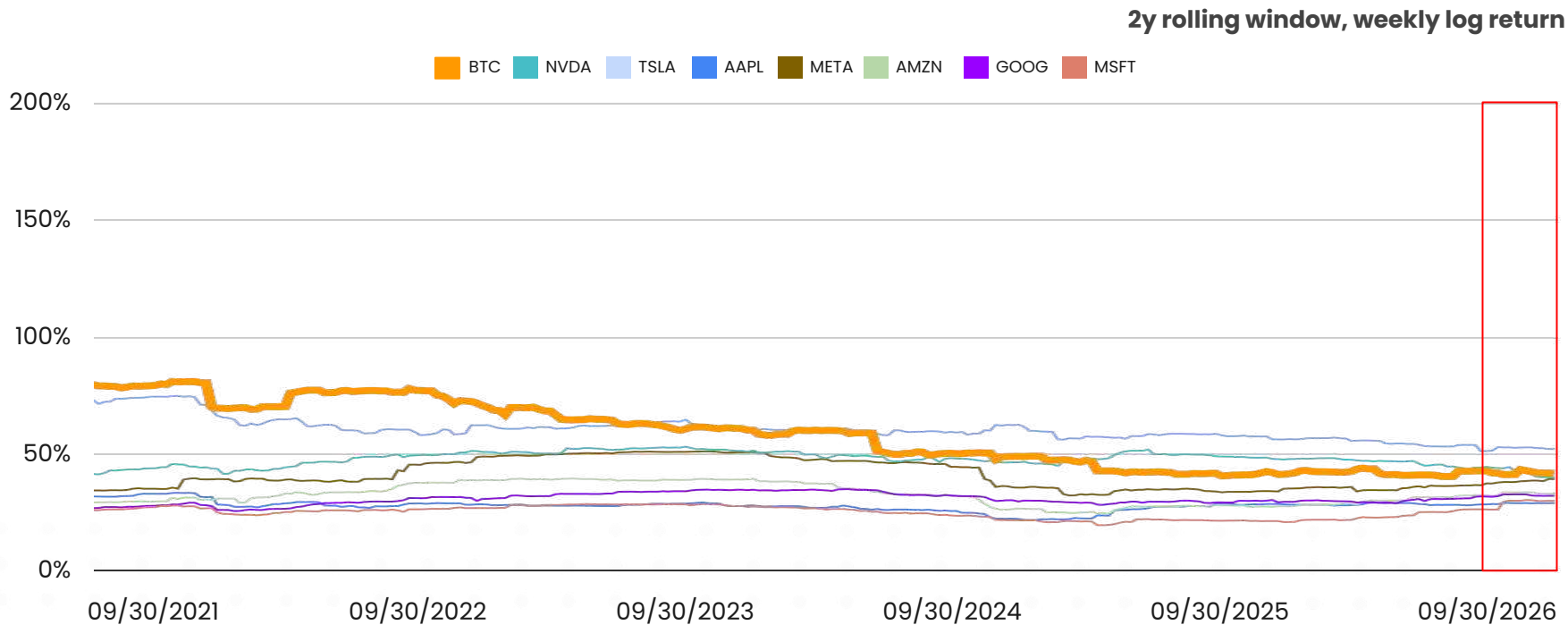
Bitcoin Remains the Least Volatile Major Crypto-Asset

Major coins volatility



Bitcoin's Volatility Compression Brings Its Risk Profile Closer to Major Tech Stocks

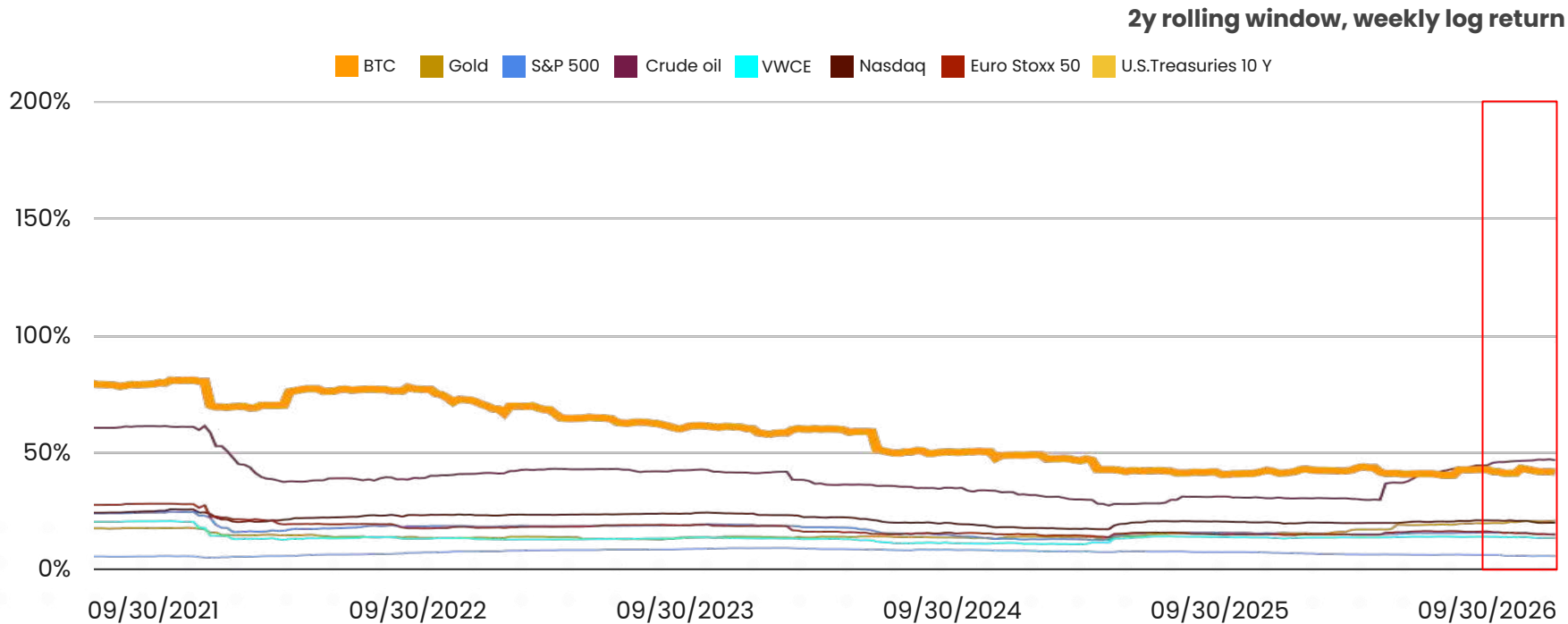
BTC & MAG 7 volatility



Source: Digital Gold Institute 2026, CoinGecko, Yahoo Finance

Bitcoin Volatility Is Gradually Converging with Traditional Asset Classes

BTC & major traditional assets volatility

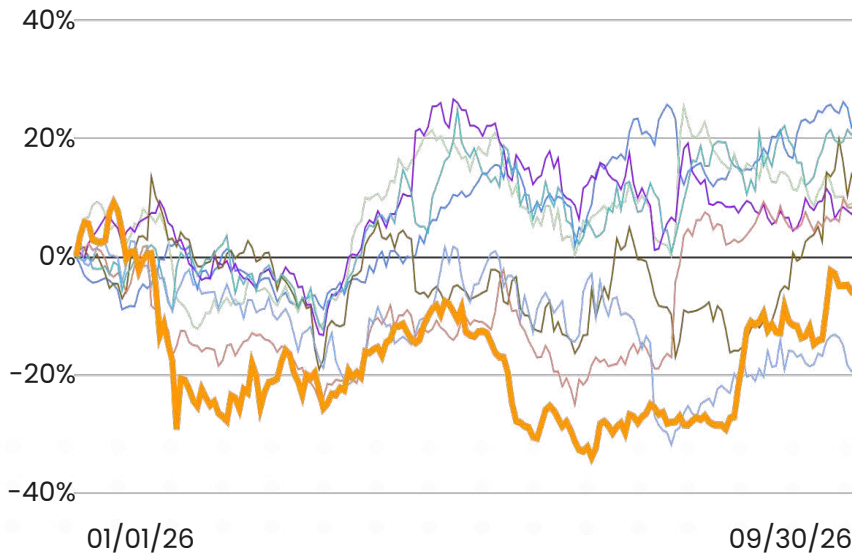
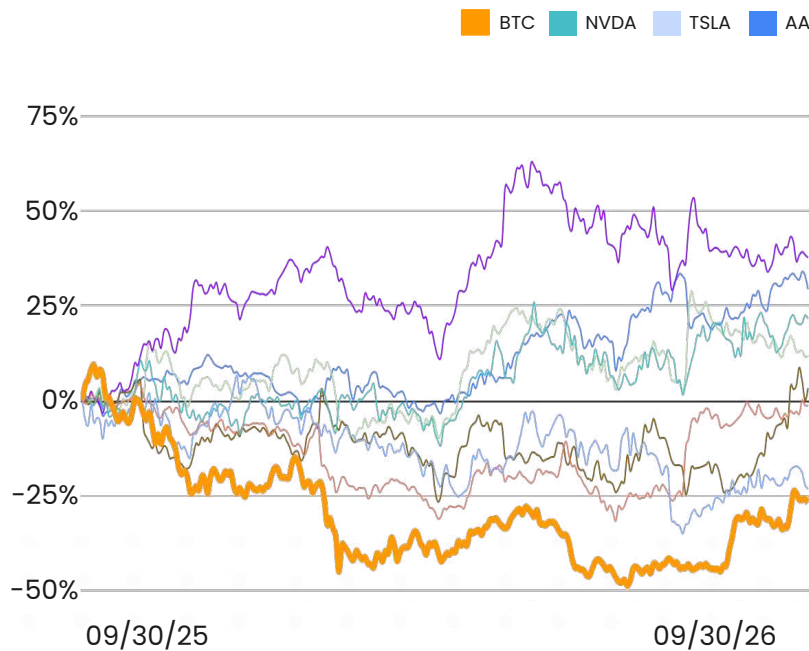


Source: Digital Gold Institute 2026, CoinGecko, Yahoo Finance

Bitcoin Rebounds in Q3 but Continues to Trail Most Major Technology Stocks

YoY BTC & MAG 7 performance

YTD BTC & MAG 7 performance

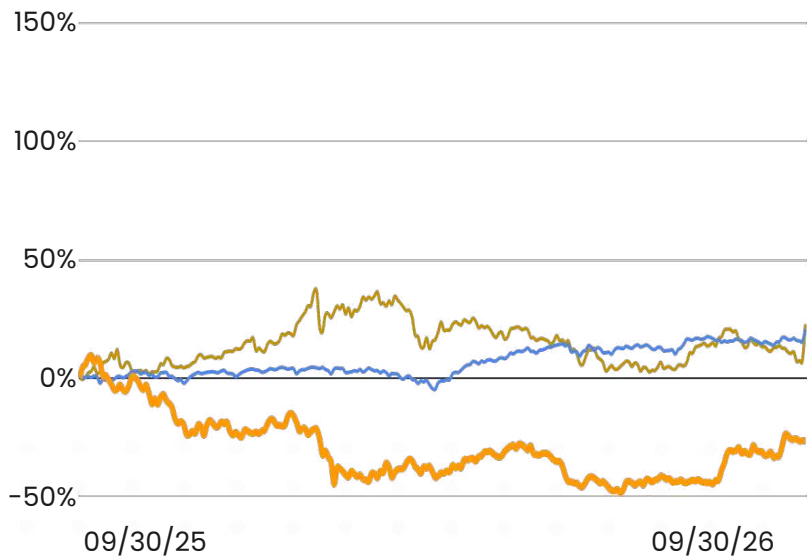


The S&P 500 Leads YTD Returns, While Bitcoin and Gold Remain Negative

YoY BTC, S&P 500 & gold performance

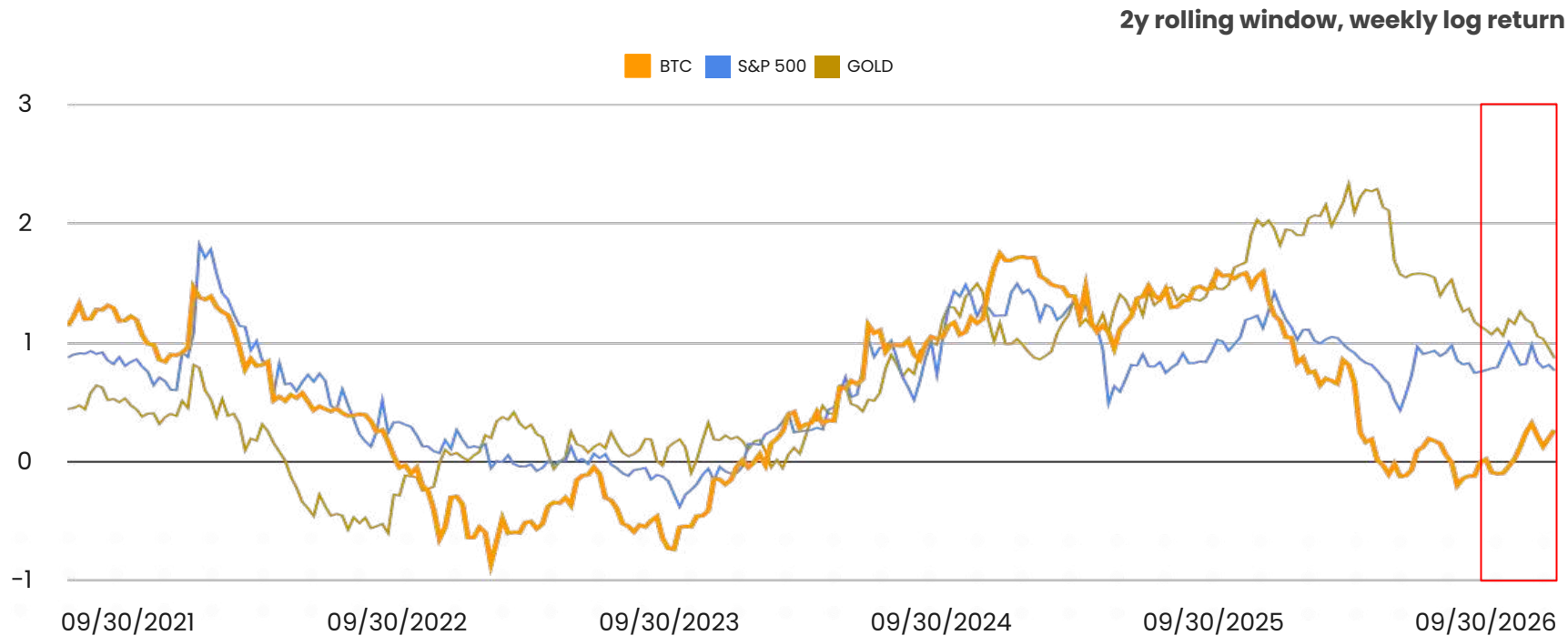
YTD BTC, S&P 500 & gold performance

BTC S&P 500 GOLD



Bitcoin's Sharpe Ratio Returns Above Zero but Still Trails Stocks and Gold

BTC, S&P 500 & Gold | Sharpe ratio

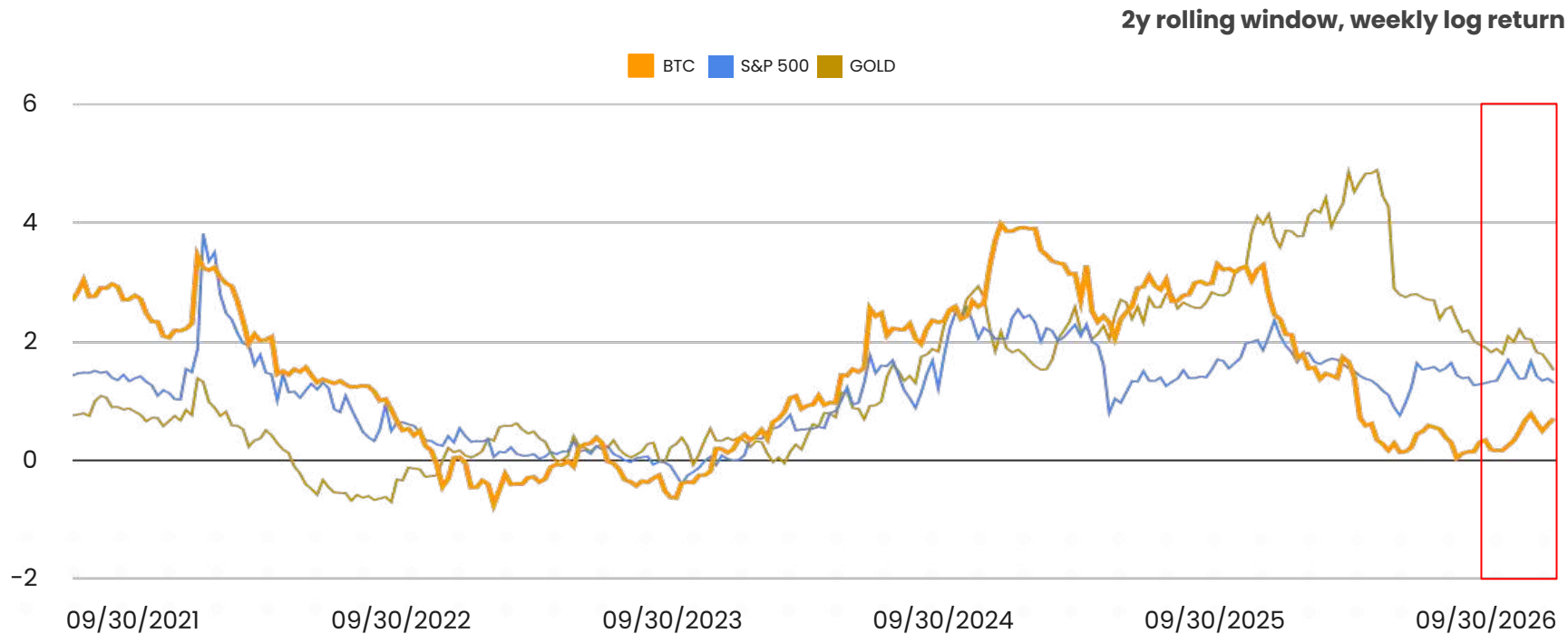


Source: Digital Gold Institute 2026, CoinGecko, Yahoo Finance

Sharpe Ratio: a measure of risk-adjusted returns, comparing excess returns to overall volatility

Bitcoin's Sortino Ratio Recovers in Q3 but Remains Below Stocks and Gold

BTC, S&P 500 & Gold | Sortino ratio

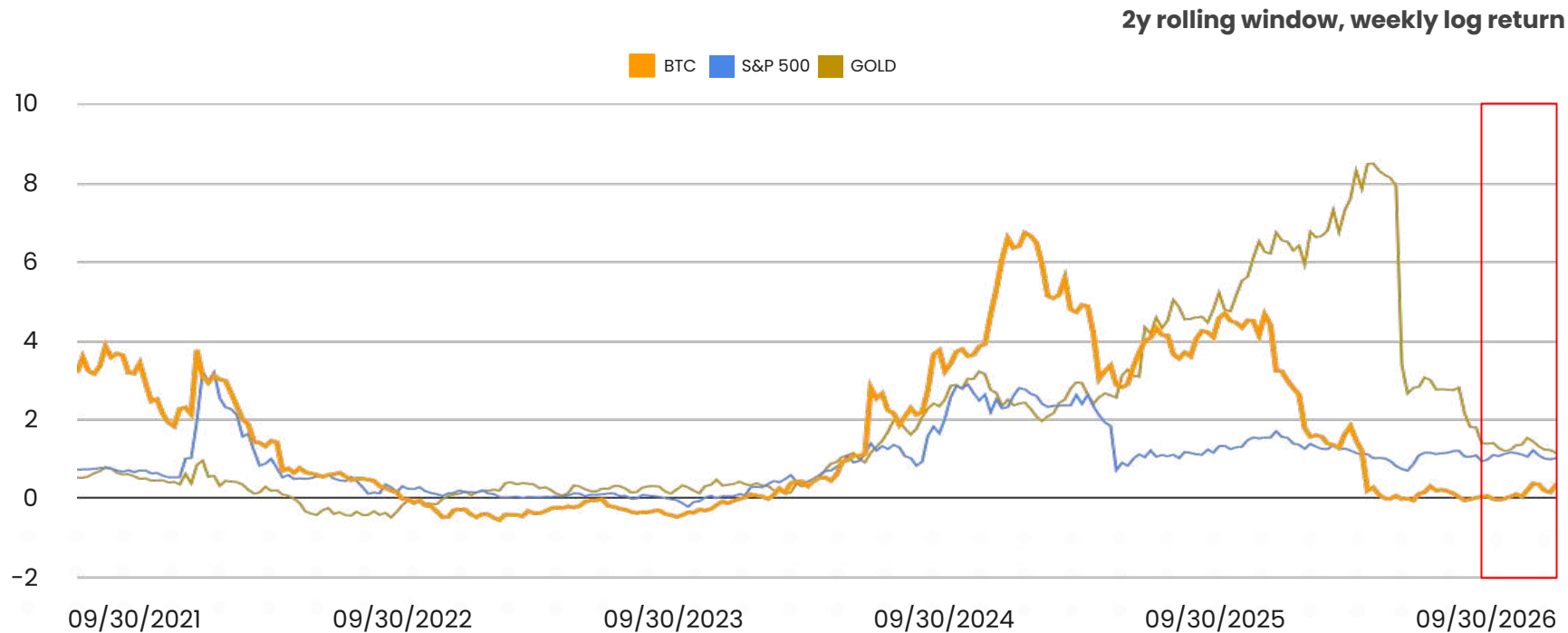


Source: Digital Gold Institute 2026, CoinGecko, Yahoo Finance

Sortino Ratio: a measure of risk-adjusted returns, comparing excess returns to downside volatility

Gold's Calmar Ratio Retreats From Its Peak, While Bitcoin's Holds Above Zero

BTC, S&P 500 & Gold | Calmar ratio

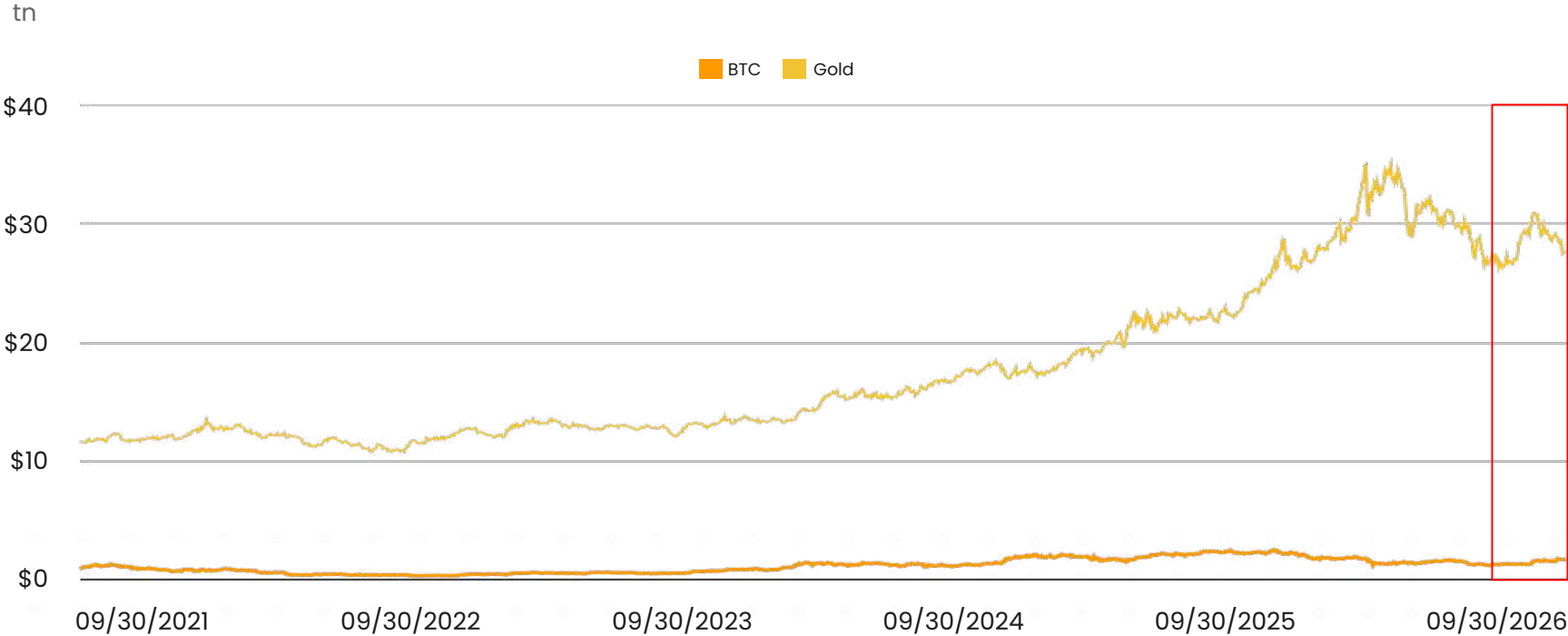


Source: Digital Gold Institute 2026, CoinGecko, Yahoo Finance

Calmar Ratio: a measure of risk-adjusted returns, comparing returns to maximum drawdown

Gold's 15x Market Cap Highlights Bitcoin's Upside Under the Digital Gold Thesis

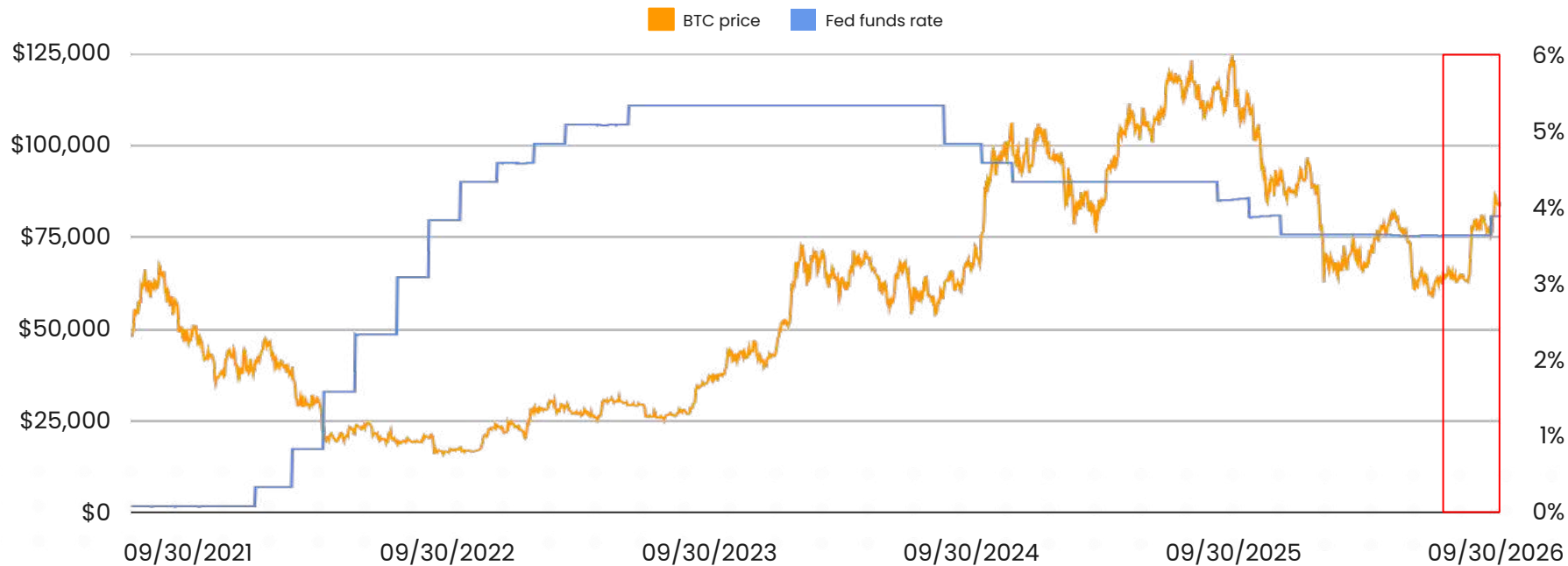
Bitcoin market cap vs. gold market cap



Source: Digital Gold Institute 2026, CoinGecko, Yahoo Finance

Fed Tightening Weighed on Bitcoin in 2022, but the Link With Rates Has Since Loosened

BTC price vs. Fed funds rate

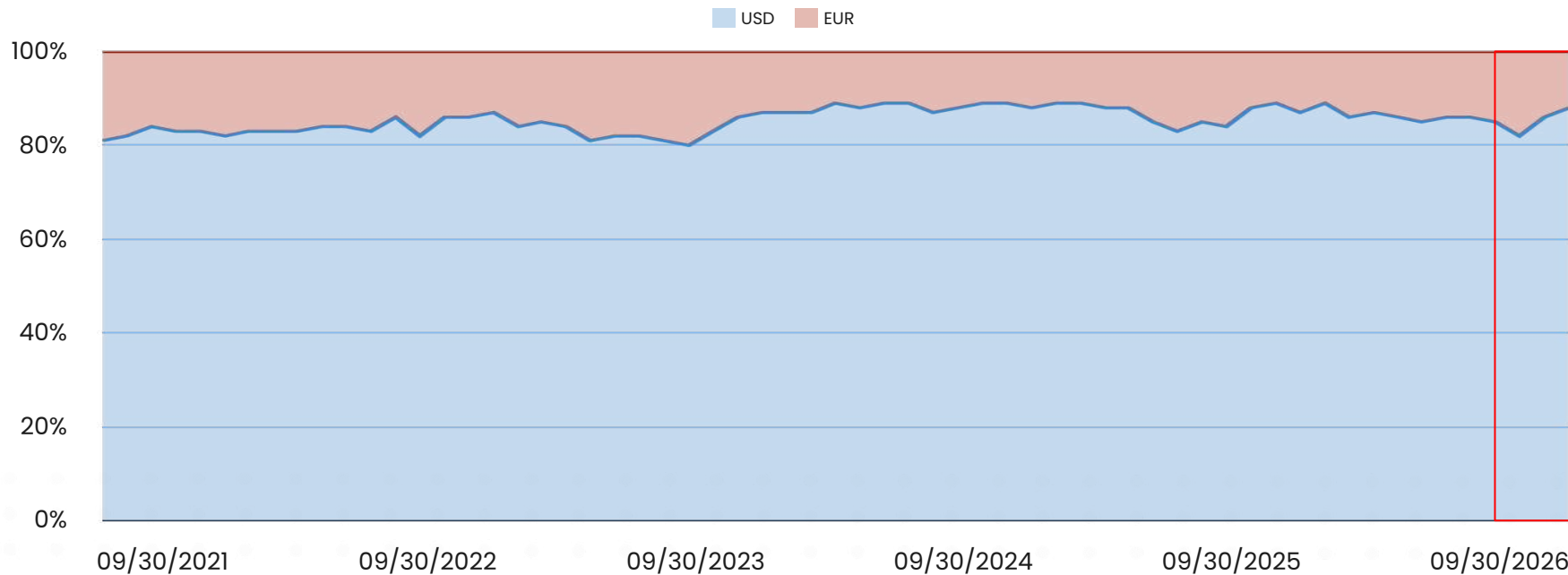


Source: Digital Gold Institute 2026, CoinGecko, FRED

Fed funds rate: the target interest rate set by the U.S. Federal Reserve

The Dollar Remains the Dominant Currency in Crypto Trading Volumes

Distribution of Trading Volume | USD vs. EUR

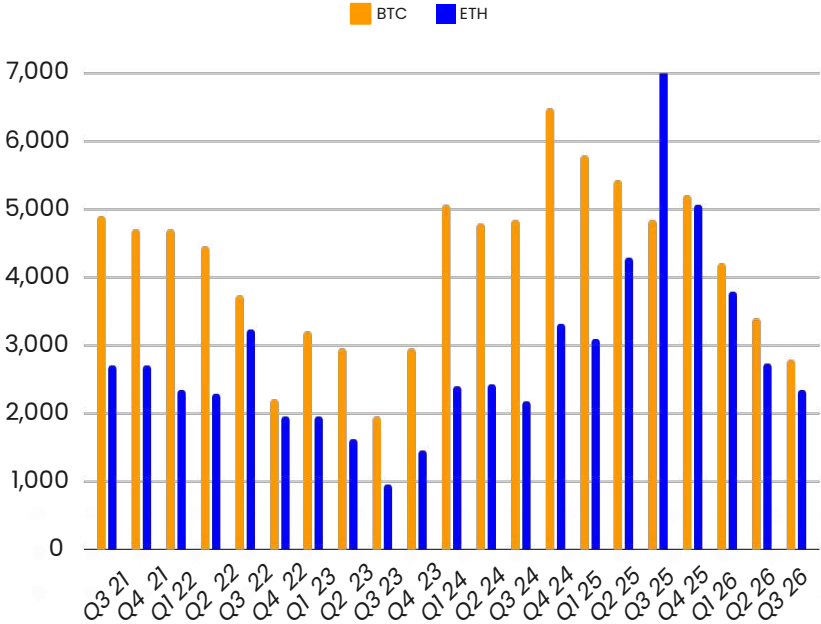


Source: Digital Gold Institute 2026, The Block

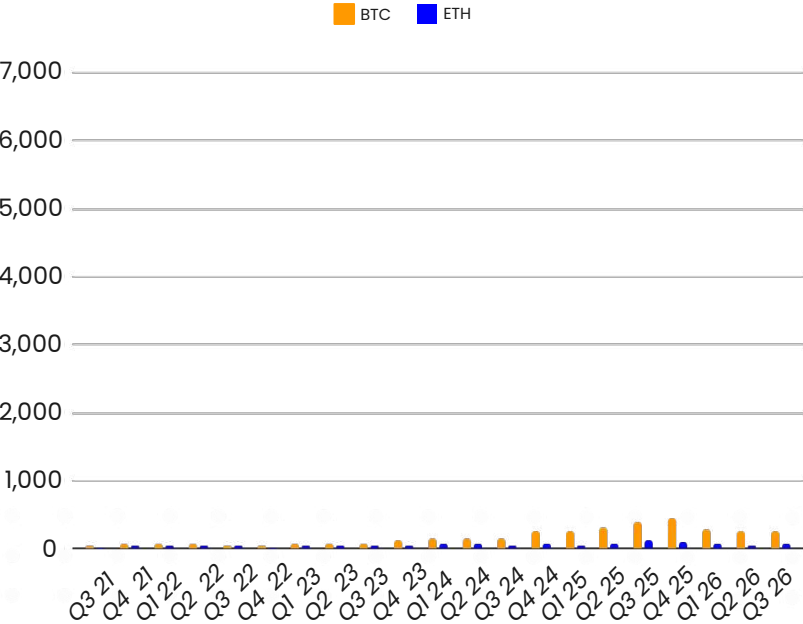
Note: share of fiat to crypto trading volume in USD and EUR only; stablecoin pairs excluded

Futures Volumes Decline Again in Q3 but Remain Far Above Options Volumes

BTC and ETH futures total volumes
\$bn



BTC and ETH options total volumes
\$bn

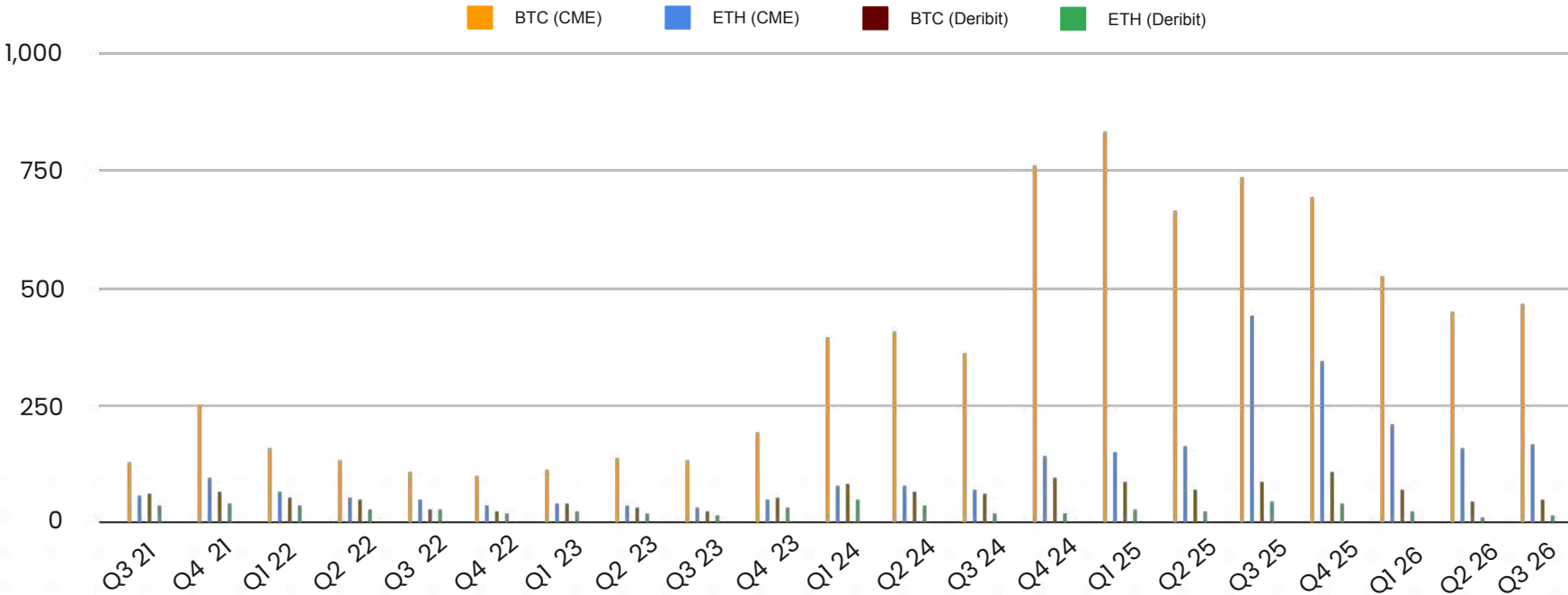


Source: Digital Gold Institute 2026, The Block

CME vs Deribit: Traditional Markets Continue to Lead Futures Activity

BTC and ETH futures volumes

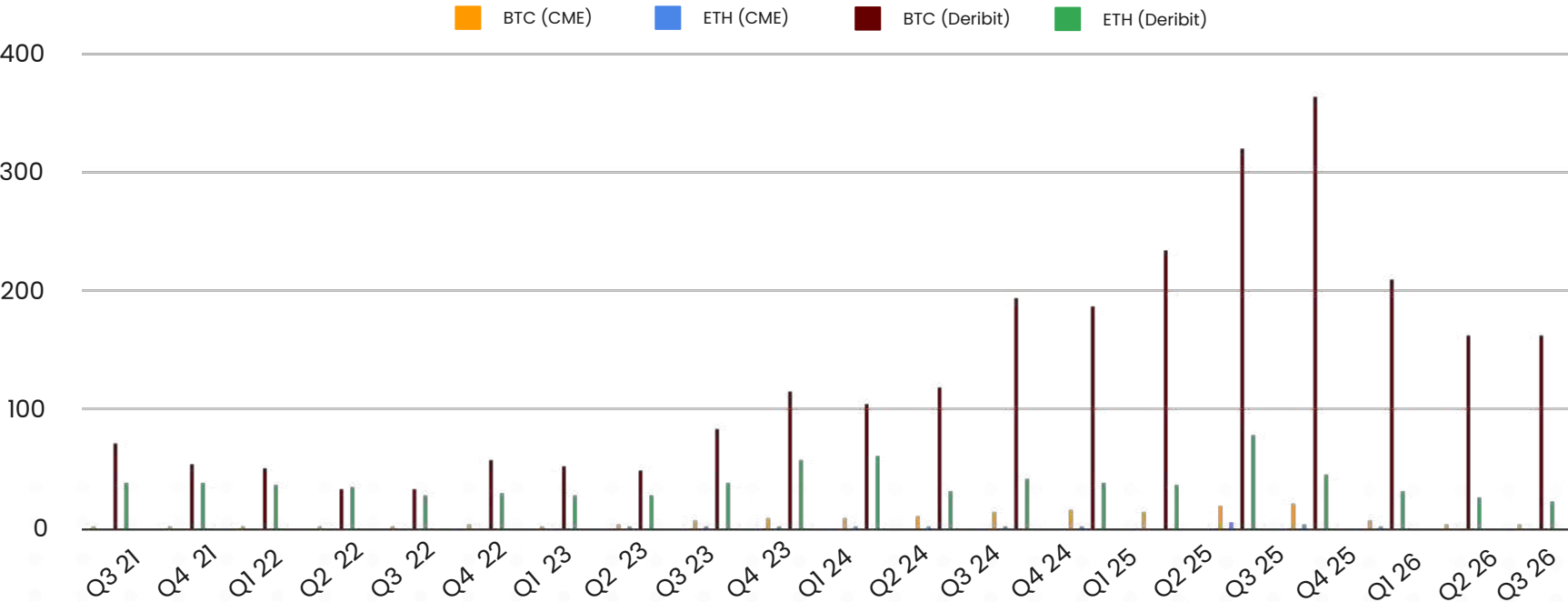
\$bn



Source: Digital Gold Institute 2026, The Block

CME vs Deribit: Crypto-Native Venues Continue to Lead Options Activity

BTC and ETH options volumes
\$bn

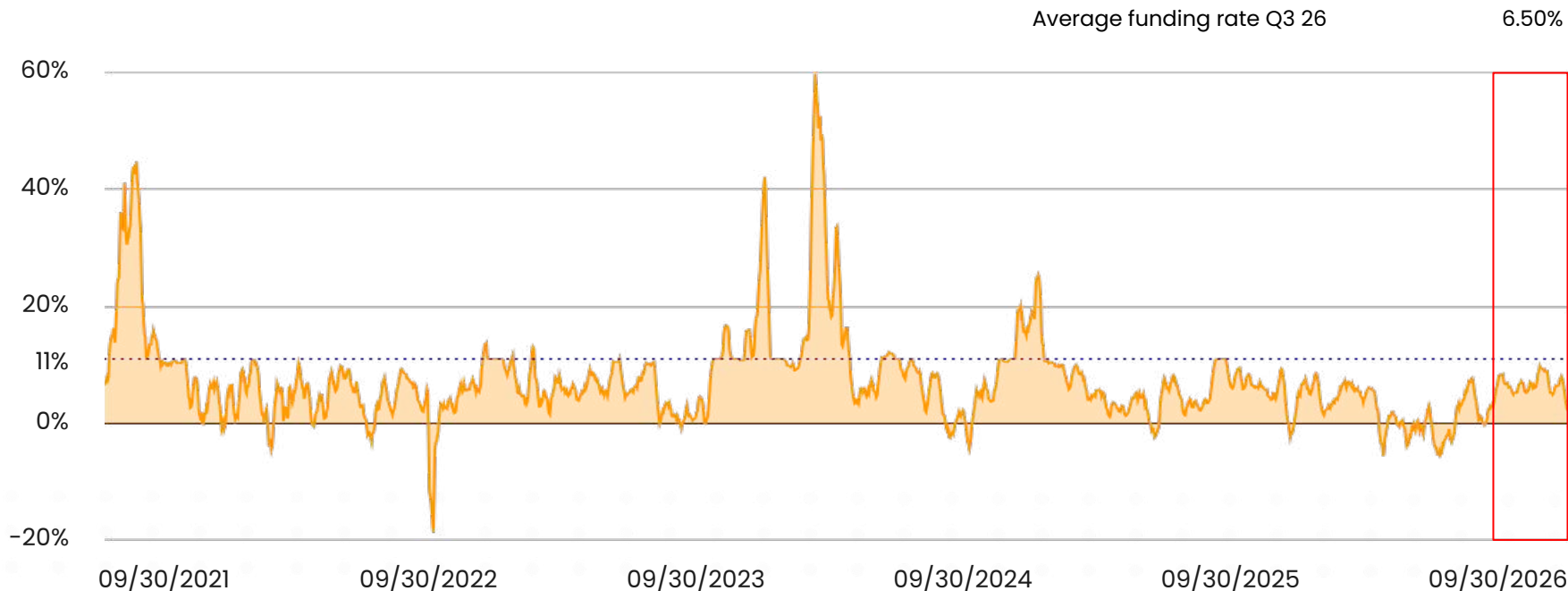


Source: Digital Gold Institute 2026, The Block

Bitcoin Rose 43% in Q3 While Funding Rates Stayed Below Neutral, Showing Little Speculative Leverage

Bitcoin perpetual futures funding rate

Annualized, 7-day moving average



Source: Digital Gold Institute 2026, Binance

Note: the dashed line marks Binance's base rate (about 11% annualized), reached when perpetual futures trade in line with spot prices

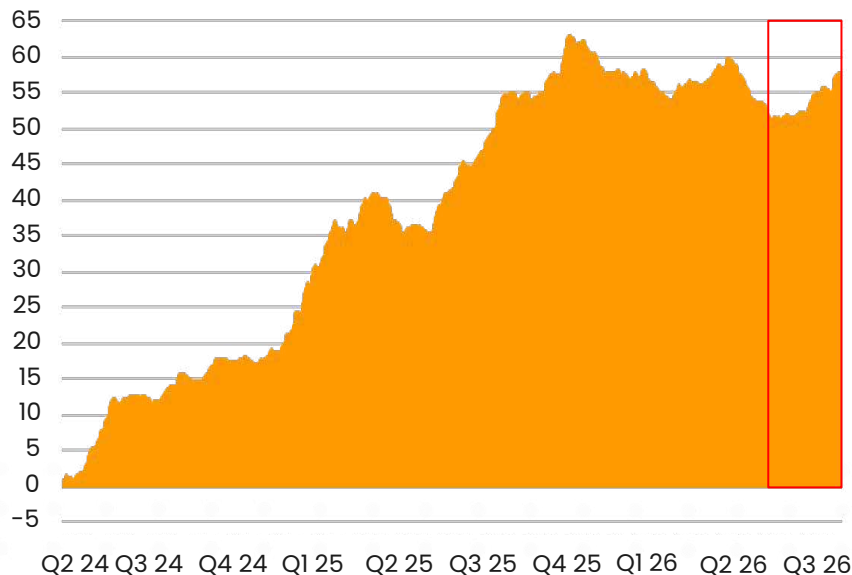
Funding rate: the periodic payment between long and short holders of perpetual futures, expressed as an annualized rate. Positive values mean bullish traders pay to keep leveraged positions open

Bitcoin and Ether ETFs Return to Inflows, Attracting a Combined \$9.3 Billion in Q3

Bitcoin ETF cumulative flows

\$bn

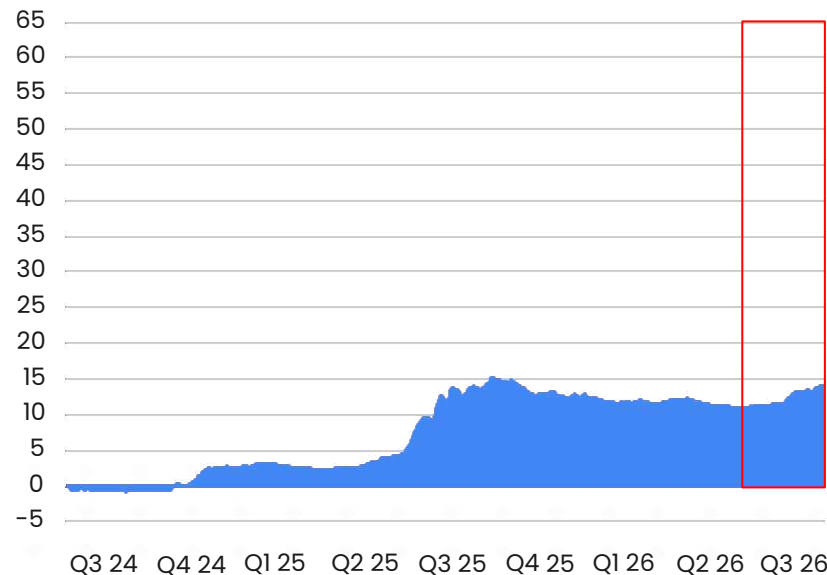
+\$6.3bn



Ether ETF cumulative flows

\$bn

+\$3.0bn



Corporates and ETFs Dominate Bitcoin Ownership, but Policy Shifts Could Favor Governments

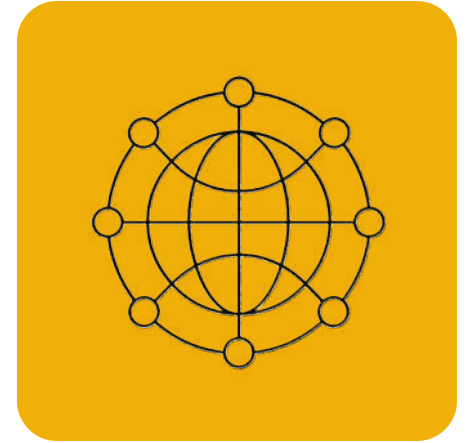
Bitcoin in treasuries

Category	# of BTC	Value as of 09/30/26	% of 21m
ETFs	1,487,459	\$128.42bn	7.08%
Public Companies	1,213,010	\$104.72bn	5.77%
Countries	518,526	\$44.77bn	2.46%
Private Companies	441,792	\$38.14bn	2.10%
DeFi	267,236	\$23.07bn	1.23%
BTC Mining Companies	103,479	\$8.93bn	0.49%

Source: Digital Gold Institute 2026, Bitbo

SECTION 02 OF 04

Ecosystem



01

Markets

02

Ecosystem

03

Regulation

04

Technology

Deutsche Bank Announces Institutional Crypto Custody Service

On September 16, Deutsche Bank announced plans to launch digital asset custody for institutional and corporate clients in Europe. The first clients are expected to go live before the end of 2026, subject to completion of the regulatory process.

The initial offering will cover Bitcoin, Ether and selected stablecoins, including USDC, EURC and EURAU. The bank will manage wallets and private keys and enable transfers to third parties.

Tokenized financial instruments are also on the roadmap, positioning custody as part of a broader expansion into digital asset services for institutional clients.



Nasdaq to Invest \$100 Million in Payward for Tokenized Equities

On September 10, Nasdaq agreed to invest \$100 million in Payward, Kraken's parent company, strengthening their partnership on tokenized equities.

The companies plan to connect Nasdaq Equity Tokens with Payward's xStocks ecosystem, preserving shareholder rights across traditional and blockchain markets. Launch is expected in Q2 2027.

Payward will also adopt Nasdaq's market surveillance technology. The deal highlights growing cooperation between traditional exchanges and crypto platforms in building infrastructure for securities trading.



Kraken Brings U.S. Stock Trading to European Customers

On August 18, Kraken launched trading in more than 7,000 U.S.-listed stocks for eligible customers across the European Economic Area, under its MiFID II authorization.

The offering places traditional shares alongside crypto assets and tokenized equities within a single platform. Customers can choose between conventional shares and xStocks, which are backed by underlying securities and can be transferred to self-custody wallets.

The launch expands Kraken's offering beyond crypto, giving European investors access to traditional securities and blockchain-based instruments through the same trading environment.



Strategy Resumes Bitcoin Purchases After a Ten-Week Pause

In late August, Strategy resumed bitcoin purchases after roughly ten weeks, acquiring 4,603 BTC for \$369.7 million. The transaction followed a period in which the company had sold part of its holdings.

The purchases were funded through common stock issuance. Further acquisitions in September brought its treasury to 847,666 BTC by September 27, according to the company's regulatory filings.

The quarter illustrates the link between bitcoin treasury strategies and capital market funding, with liquidity needs and financial obligations shaping the pace of accumulation.

The logo for Strategy Bitcoin, featuring the word "Strategy" in a bold, black, sans-serif font, followed by a large, stylized Bitcoin symbol (a capital 'B' with two vertical bars) in the same font style. The logo is centered within a large, rounded orange rectangle.

BitMEX Closes After More Than a Decade in Crypto Derivatives

BitMEX ceased exchange operations on September 23, following a closure announcement in July. Trading, deposits and new positions were discontinued, while customers retained access to withdraw remaining balances.

Founded in 2014, BitMEX helped establish crypto derivatives trading and pioneered the perpetual swap, a contract structure subsequently adopted across the industry. Its board attributed the closure to a strategic review of the business and the wider market.

The shutdown marks the exit of one of the sector's earliest derivatives venues. It also draws attention to continuity and exit arrangements when selecting counterparties for trading and custody.



Revolut Data Leak Exposes Around 680 Crypto Customers

In September, Revolut disclosed a data breach affecting around 680 customers, including individuals with crypto holdings. Attackers obtained sensitive information by submitting fraudulent requests that appeared to originate from a legitimate government agency.

The exposed records included identity documents, home addresses, account details and crypto transaction histories. Revolut said its systems and customer funds remained unaffected, and notified customers and relevant authorities.

The incident highlights the importance of verifying requests for customer information. For crypto holders, linking financial activity to personal identities and addresses can increase exposure to targeted fraud and physical threats.

The Revolut logo is displayed in a large, bold, black sans-serif font. It is centered within a white rounded rectangle that has a thin orange border. The background of the slide features a subtle pattern of small grey dots.

SECTION 03 OF 04

Regulation



01

Markets

02

Ecosystem

03

Regulation

04

Technology

Italian Parliamentary Group Calls for 26% Crypto Tax

On September 24, Italy's parliamentary intergroup on digital assets proposed restoring the tax rate on crypto capital gains to 26% from January 2027, reversing the increase to 33% introduced in 2026.

The proposal would align crypto taxation with the standard treatment of financial investments. It also includes deductibility of related costs and the ability to offset crypto losses against gains on other financial instruments, and vice versa.

The measures remain proposals requiring legislative approval. Their stated objective is to remove differences in tax treatment between crypto and other investments.



EU Central Banks Propose Revising Stablecoin Reserve Requirements

In September, the European System of Central Banks proposed revising MiCAR's stablecoin reserve requirements as part of the European Commission's review of the regulation.

The proposal would remove minimum bank deposit allocations of 30%, or 60% for significant tokens, and replace them with requirements for assets maturing within one and five working days.

The central banks argue that large deposits from stablecoin issuers can transmit liquidity stress to banks, while alternative reserve assets can also meet redemption needs. The recommendations remain subject to further assessment and legislative action, with existing rules continuing to apply.



Eurosystem Launches Pontes for Tokenized Asset Settlement

On September 21, the Eurosystem launched Pontes, enabling wholesale transactions in tokenized assets to settle in central bank money. The service connects market DLT platforms with the Eurosystem's TARGET infrastructure.

An initial group of banks and market infrastructures has completed onboarding, with further participants expected to join progressively. The launch builds on the Eurosystem's 2024 trials, while additional functionality and longer operating hours are planned through 2028.

Pontes provides a concrete settlement route for institutions developing tokenized financial products. It brings access to central bank money into these markets, addressing a key requirement for wider institutional adoption.



CLARITY Act Stalls After Failed Senate Vote

On September 15, the U.S. Senate failed to advance the CLARITY Act. A procedural vote drew 49 votes in favor and 50 against, falling short of the 60 required.

Disagreements centered on potential conflicts involving President Trump's crypto interests and on stablecoin rewards, which banking groups argue could accelerate deposit outflows.

The setback leaves the bill's path to enactment uncertain. The proposed framework would clarify SEC and CFTC responsibilities for digital asset markets, while both agencies continue developing rules under their existing authority.



Bitpanda Fined €70,000 in Austria's First Published MiCAR Case

On August 14, Austria's Financial Market Authority published a final €70,000 fine against Bitpanda for breaches of MiCAR. It was the regulator's first published, legally binding penalty under the framework.

The violations concerned a crypto-asset white paper that was not submitted at least 20 working days before publication, marketing issued before the white paper was available, and missing mandatory disclosures and contact details.

The case brings MiCAR enforcement beyond licensing and into offering and marketing practices. For institutions distributing crypto products, it highlights the need to coordinate regulatory notifications, publication schedules and customer communications.

Source: Digital Gold Institute 2026



MiCAR Licensing Gathers Pace, With 360 CASPs Authorized by 27 Countries

MiCAR crypto-asset service provider authorizations

360

Authorized CASPs

27

Countries that issued licenses

64

Licenses issued in the quarter

9

Licenses issued in Italy

201

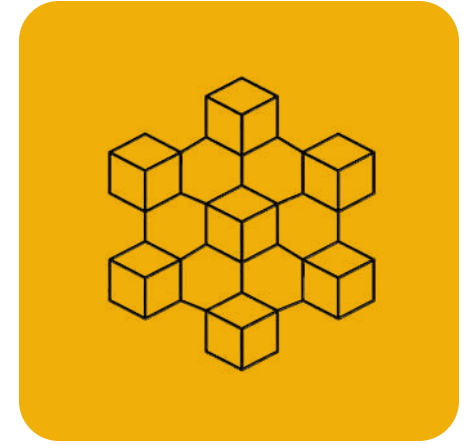
CASPs authorized to operate in Italy

13th

Italy's ranking by licenses issued

SECTION 04 OF 04

Technology



01

Markets

02

Ecosystem

03

Regulation

04

Technology

Coldcard Firmware Flaw Compromises Seed Generation

In July, Coinkite disclosed a Coldcard firmware flaw that weakened the randomness used to generate wallet seeds. Attackers exploited vulnerable seeds to reconstruct private keys and steal bitcoin.

Exploitation required no access to the devices. The vulnerability affected seeds created with certain firmware versions, exposing funds even when the wallets were kept offline.

Coinkite released corrected firmware, but updating alone does not secure existing vulnerable seeds. These must be replaced and funds transferred to new wallets. The incident underscores the importance of secure key generation in offline custody.



Bitget Hit by \$388 Million Hack Through Wallet Infrastructure

Bitget suffered a security breach on September 24, with approximately \$388 million transferred from its hot and warm wallets. The exchange suspended withdrawals while investigating the attack and securing its infrastructure.

According to Bitget, attackers exploited a third-party software vulnerability and forged withdrawal instructions. Cold wallets and private keys were unaffected. The company stated that its \$464 million Protection Fund would cover the losses, and withdrawals began resuming in phases on September 28.

The incident highlights how weaknesses in transaction approval systems and external dependencies can undermine custody controls even when private keys remain secure.

Source: Digital Gold Institute 2026



Exploit Drains \$320 Million from Blockstream's Liquid Network

On September 6, a vulnerability in Liquid, the Bitcoin sidechain developed by Blockstream, allowed attackers to create approximately 4,000 unbacked L-BTC and redeem them for real bitcoin worth around \$320 million.

Blockstream coordinated a network halt and patched the flaw. The attackers returned 3,400 BTC the following day, while approximately 602 BTC remained unrecovered according to the company's September 23 assessment.

The episode highlights the additional risks introduced by sidechains. Bitcoin's protocol remained unaffected, but Liquid's validation software accepted counterfeit tokens as legitimate, enabling withdrawals from its reserves without compromising private keys.



Zcash Addresses Orchard Vulnerability With Ironwood

On July 28, Zcash activated Ironwood, introducing a new shielded pool following the Orchard vulnerability discovered in May.

Orchard now blocks new deposits and caps withdrawals at the value verifiably deposited. Ironwood combines formal verification and independent security review to strengthen supply integrity while preserving privacy.

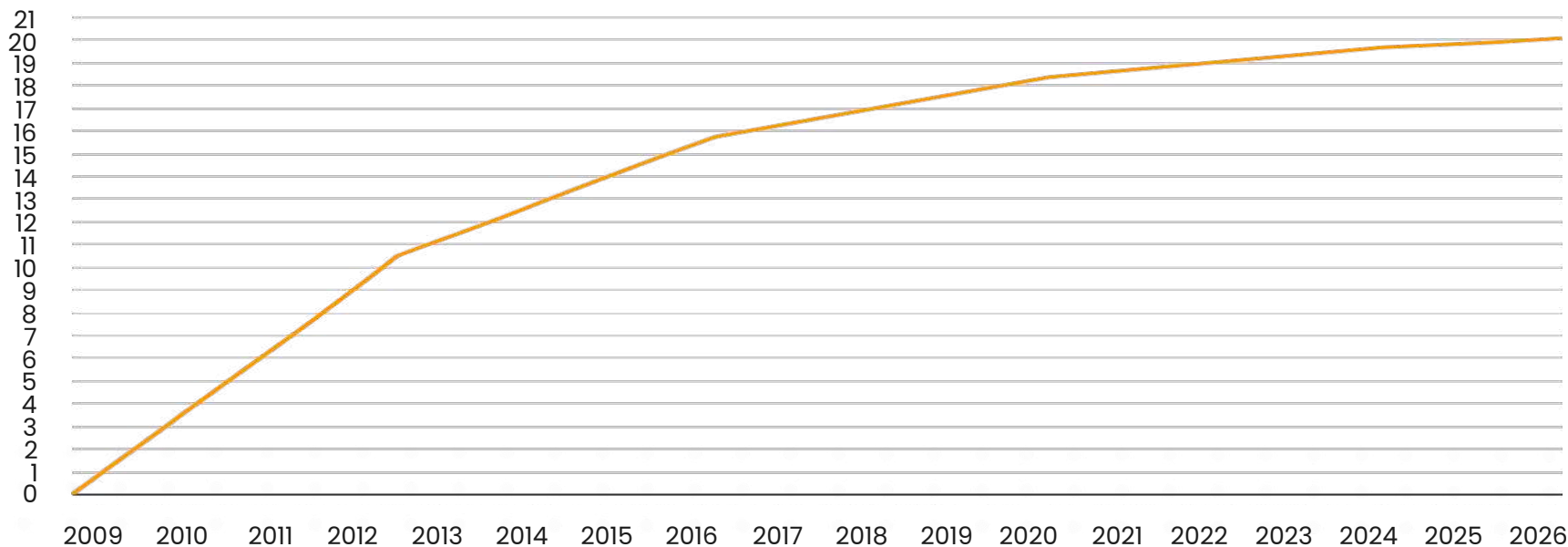
Developers reported no evidence of exploitation, though past counterfeiting cannot be excluded through transaction inspection alone. Users must migrate existing Orchard funds to Ironwood.



Bitcoin Issuance Passes 20 Million, with the Final Million Spread Across 114 Years

Bitcoin issuance

M coins



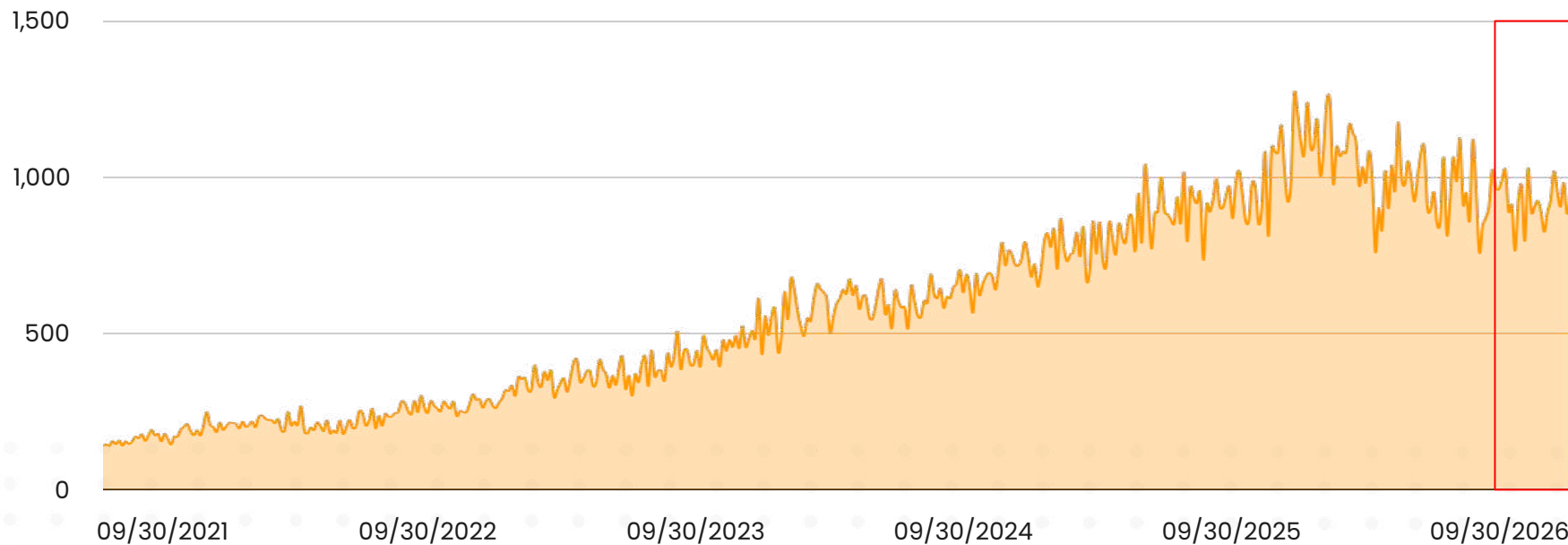
Source: Digital Gold Institute 2026, Blockchain.com

Bitcoin issuance: new bitcoins created as block rewards, capped at 21 million

Hash Rate Pulls Back but Remains Near Record Levels, Underscoring Network Strength

Mining hash rate

Exahash per second



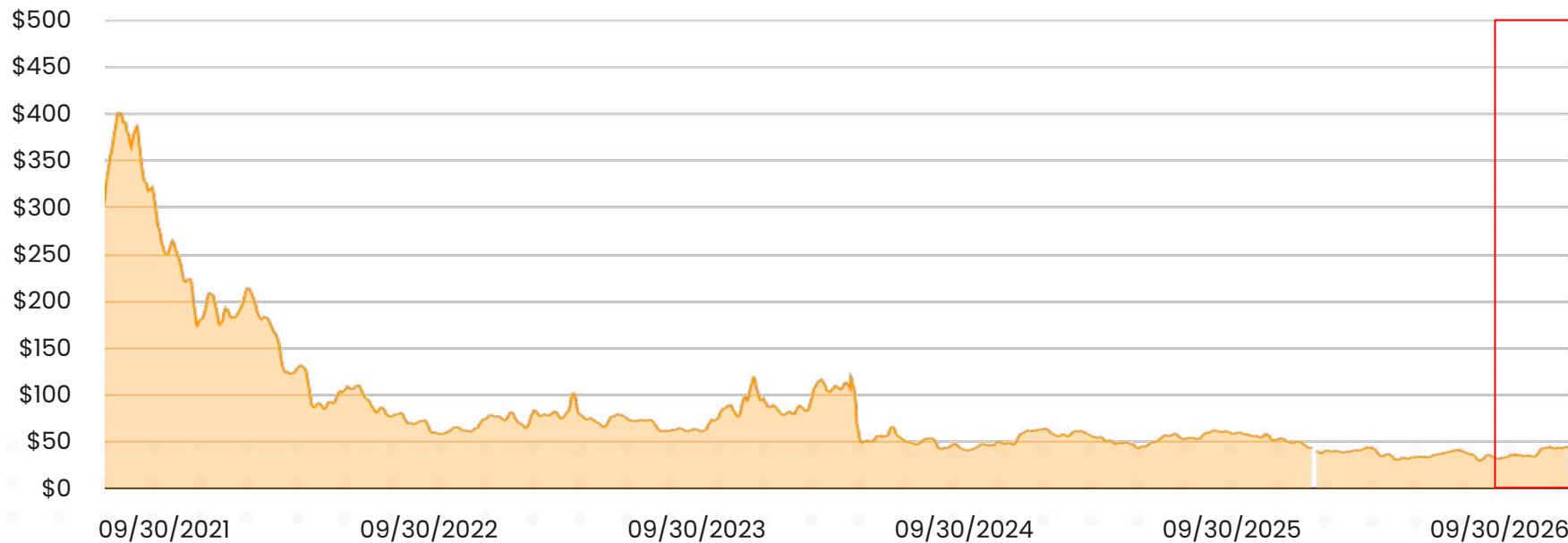
Source: Digital Gold Institute 2026, Blockchain.com

Hash Rate: a measure of the total computational power used to secure the network and validate transactions

Mining Revenue per Unit of Computing Power Stays Low as Network Competition Intensifies

Mining hashprice

US dollars per petahash per second per day



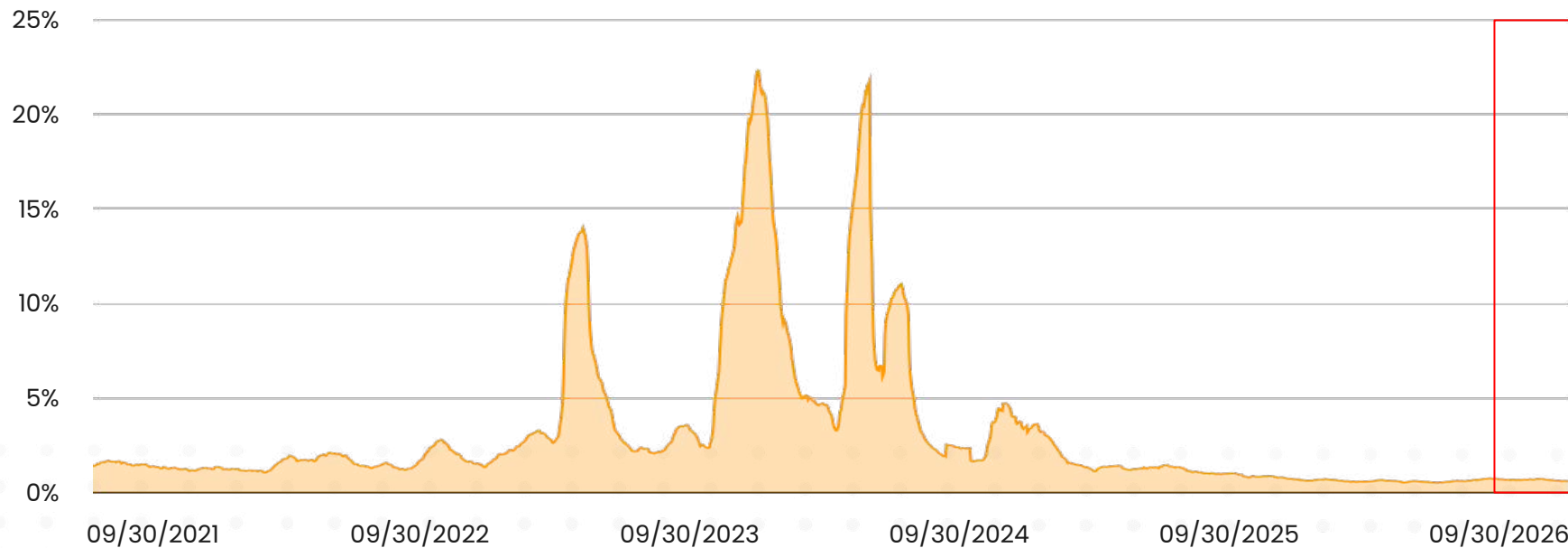
Source: Digital Gold Institute 2026, Blockchain.com

Hashprice: miners' daily revenue per petahash per second of computing power, before costs

Block Rewards Still Fund Almost All of Bitcoin's Network Security

Transaction fees

Share of miners' revenue, 30-day moving average



Source: Digital Gold Institute 2026, Blockchain.com

Fee share: transaction fees as a percentage of miners' total revenue, including block rewards

Quarter Takeaways



Crypto Markets Rebound with Renewed ETF Inflows

Q3 brought a broad recovery, with **Bitcoin up 43%, Ether up 71%** and total market capitalization rising **40%**. Bitcoin and Ether ETFs attracted **\$9.3 billion in combined inflows**, reflecting renewed investor demand. Bitcoin's **declining volatility and low correlations with traditional assets** further supported its diversification potential.



Institutional Adoption Advances as Regulation Evolves

Deutsche Bank's custody plans, Nasdaq's tokenization partnership and Pontes **strengthen the link between digital assets and traditional finance**. Regulatory debate spans stablecoin reserves and taxation, with **EU central banks proposing revised MiCAR requirements** and Italy's parliamentary intergroup seeking a **return to the 26% tax rate**. In the U.S., the CLARITY Act remains stalled.



Attacks Expose Software and Operational Weaknesses

The Bitget and Liquid attacks exposed failures in transaction approval and validation despite uncompromised private keys. Coldcard's firmware flaw showed that keeping wallets offline cannot compensate for weak seed generation. Together, these incidents underline the **need to assess software, operational controls and external dependencies throughout the custody process**.

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