

Monthly Market Recap

December 2025

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Market Performance

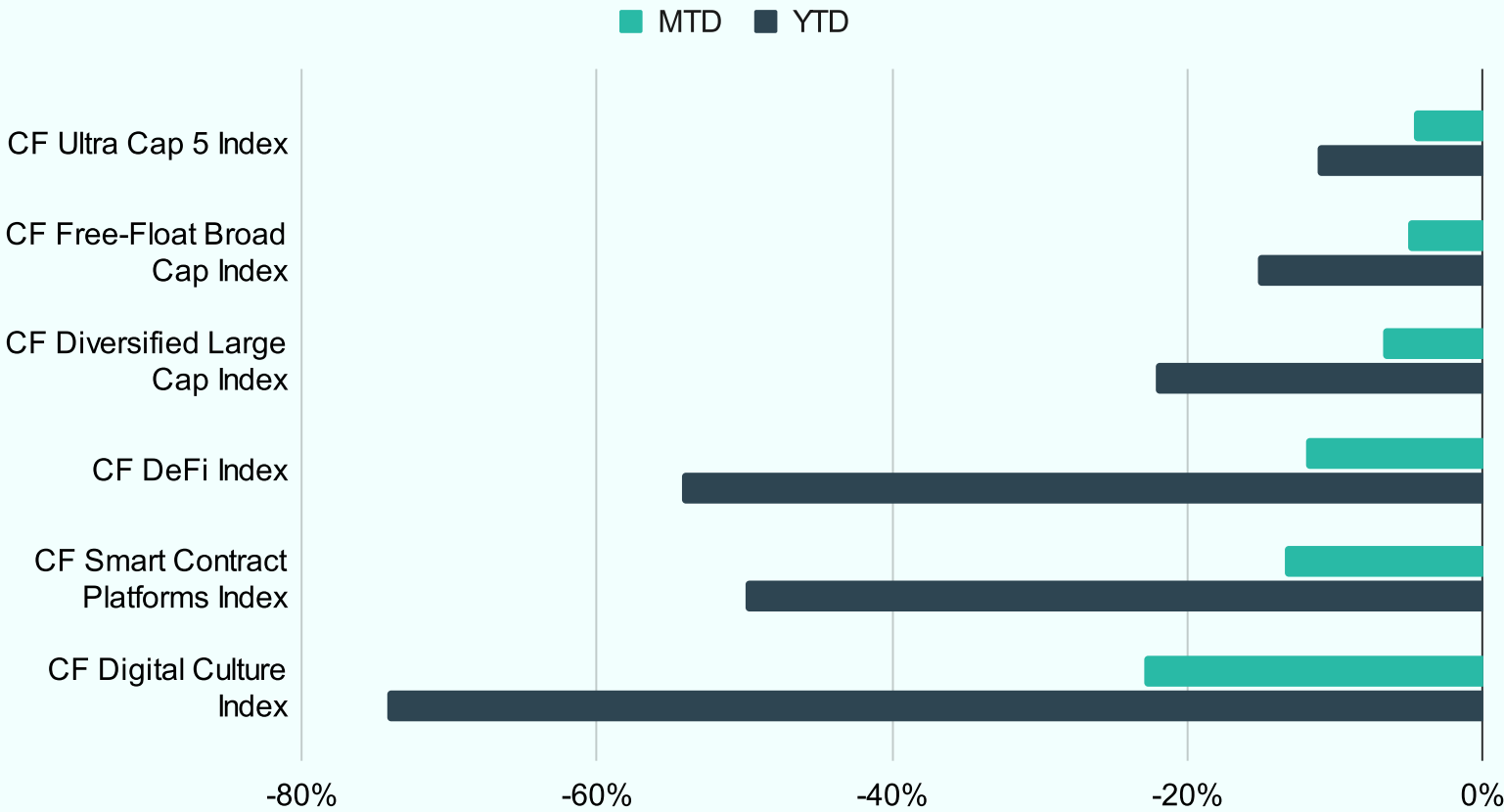
Data Delays & Defensive Tilts

Market Summary

The year closed with cautious easing and ongoing market-structure upgrades. The FOMC cut rates by 25 bps, while meeting minutes revealed a deep divide among voting members of the committee. Bitcoin remained choppy and range-bound, oscillating around \$90k, as risk-off sentiment persisted. The month was shaped by a swath of key macro releases, including a surprisingly strong GDP print and softer-than-expected inflation alongside delayed payrolls and retail sales, blurring the growth-inflation picture amid seasonally low liquidity and year-end tax-loss harvesting. With visibility low, investors de-risked: flows turned selective, relative strength narrowed to mega-caps, and bid-ask depth thinned across higher-beta tokens. Implied and realized volatility compressed relative to last month, consistent with low-conviction investor sentiment, while discretionary risk budgets were conserved pending cleaner data and clearer guidance on the 2026 easing path.

Index performance reflected this defensive posture. The CF Ultra Cap 5 Index fell 4.63% month-to-date (YTD: -11.24%), while the CF Free-Float Broad Cap and CF Diversified Large Cap declined 5.11% (YTD: -15.25%) and 6.72% (YTD: -22.14%), respectively. Higher-beta cohorts led losses: CF Smart Contract Platforms -13.44% (YTD: -50.00%), CF DeFi -12.02% (YTD: -54.25%), and CF Digital Culture -22.90% (YTD: -74.26%). Mega-caps again proved relatively resilient, but the complex finished the year materially lower across risk tiers, with leadership narrowly concentrated in the most liquid, institutionally held names.

Benchmark Performance

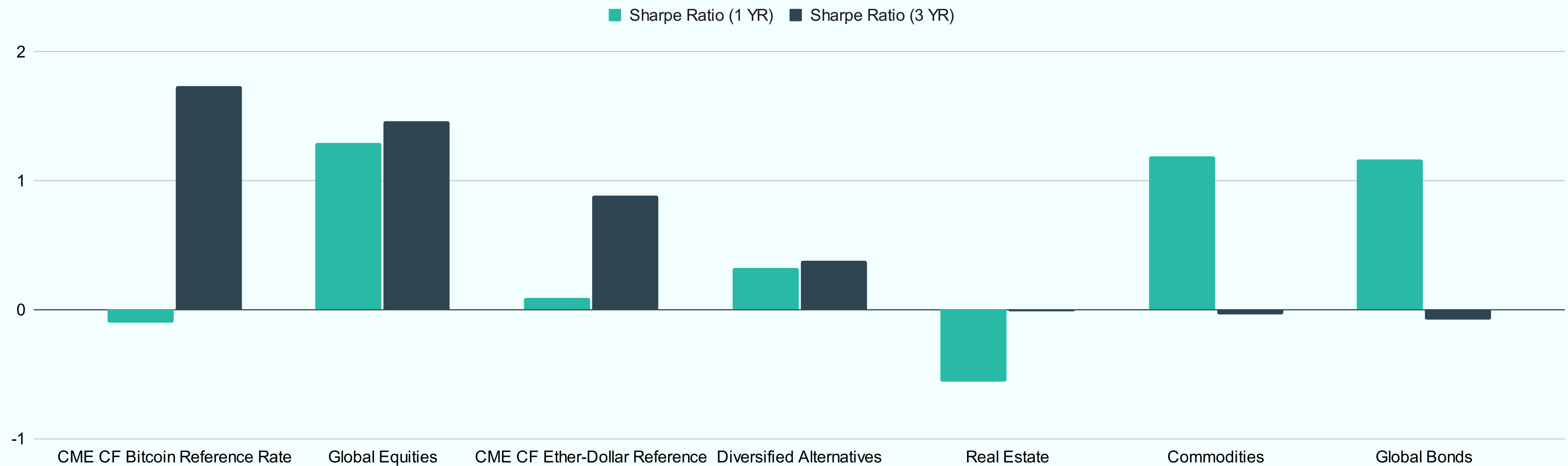


All index performance is rebased to 100.
Source: CF Benchmarks, Bloomberg, as of December 31, 2025

Trailing Risk-Adjusted Returns

The Sharpe ratio measures the return of an asset relative to the risk taken. Both Bitcoin and Ether currently demonstrate strong risk-adjusted performance over a longer, three-year horizon, positioning them favorably relative to many traditional asset classes.

Sharpe Ratio



Source: CF Benchmarks, Bloomberg, total return indices are referenced in USD, as of December 31, 2025

Major Crypto-Pairs

Name	Category	Sub-Category	Segment	1 Month	3 Month	1 Year	30 D Volatility
Bitcoin Cash	Settlement	Non-Programmable	Store Of Value And Payment	9.0%	7.0%	37.3%	50.95
Maker	Sectors	Finance	Stablecoin Issuance & Management	2.5%	-15.4%	-8.9%	54.49
Tezos	Settlement	Programmable	General Purpose Smart Contract Platforms	2.0%	-25.4%	-60.9%	43.34
Ether	Settlement	Programmable	General Purpose Smart Contract Platforms	-1.5%	-29.0%	-11.0%	37.50
Bitcoin	Settlement	Non-Programmable	Store Of Value And Payment	-3.9%	-23.5%	-6.5%	22.13
Uniswap	Sectors	Finance	Trading	-7.6%	-26.4%	-57.7%	73.72
Chainlink	Services	Utility	Oracles	-7.6%	-43.3%	-38.8%	37.78
Litecoin	Settlement	Non-Programmable	Store Of Value And Payment	-8.4%	-28.6%	-26.0%	38.41
Solana	Settlement	Programmable	General Purpose Smart Contract Platforms	-9.3%	-40.8%	-35.5%	36.35
Avalanche	Settlement	Programmable	General Purpose Smart Contract Platforms	-10.4%	-59.1%	-65.5%	54.37
Curve DAO Token	Sectors	Finance	Trading	-13.5%	-47.9%	-59.8%	60.21
Synthetix	Sectors	Finance	Derivatives	-15.9%	-44.8%	-60.2%	80.89
Ripple	Settlement	Non-Programmable	Store of Value and Payment	-15.9%	-36.0%	-12.2%	34.19
Ethereum Classic	Settlement	Programmable	General Purpose Smart Contract Platforms	-17.3%	-38.1%	-54.5%	45.10
Filecoin	Services	Utility	Information & Data Management	-17.7%	-41.1%	-73.8%	80.57
Aave	Sectors	Finance	Borrowing & Lending	-17.9%	-46.9%	-52.7%	59.21
Stellar	Settlement	Non-Programmable	Store Of Value And Payment	-19.2%	-44.9%	-39.6%	43.71
Algorand	Settlement	Programmable	General Purpose Smart Contract Platforms	-19.3%	-47.0%	-67.0%	50.06
EOS	Settlement	Programmable	General Purpose Smart Contract Platforms	-19.9%	-59.7%	-79.6%	55.75
Vechain	Settlement	Programmable	General Purpose Smart Contract Platforms	-20.6%	-52.1%	-75.9%	57.17
Polkadot	Settlement	Programmable	General Purpose Smart Contract Platforms	-20.8%	-54.3%	-73.2%	59.16
Dogecoin	Settlement	Non-Programmable	Store Of Value And Payment	-21.2%	-49.8%	-63.0%	50.24
Cardano	Settlement	Programmable	General Purpose Smart Contract Platforms	-21.3%	-58.8%	-60.8%	57.91
Stacks	Services	Infrastructure	Computing	-21.8%	-58.4%	-84.3%	56.59
Cosmos	Settlement	Programmable	General Purpose Smart Contract Platforms	-22.0%	-51.6%	-69.8%	60.38
Decentraland	Sectors	Culture	Vr And Ar	-24.2%	-57.8%	-73.9%	47.23
Polygon	Services	Infrastructure	Scaling	-24.8%	-55.5%	-77.7%	42.64
Hedera	Settlement	Programmable	General Purpose Smart Contract Platforms	-24.8%	-50.6%	-60.4%	50.21
Apecoin	Sectors	Culture	Social	-25.7%	-63.2%	-84.0%	59.38
Internet Computer	Settlement	Programmable	General Purpose Smart Contract Platforms	-25.9%	-33.1%	-71.2%	84.26
Fantom	Settlement	Programmable	General Purpose Smart Contract Platforms	-43.7%	-72.5%	-91.0%	131.47

Source: Returns are based in USD terms, CF Benchmarks, Bloomberg, as of December 31, 2025

Leaders

Bitcoin Cash (BCH) led the pack in December with a 9.0% monthly gain, supported by renewed network attention tied to inscription activity. The Blue chip DeFi protocol Maker (MKR) followed, up 2.5%. Tezos (XTZ) rounded out the top performers with a 2.0% advance, helped by a late-month upgrade aimed at higher throughput and faster confirmations.

Laggards

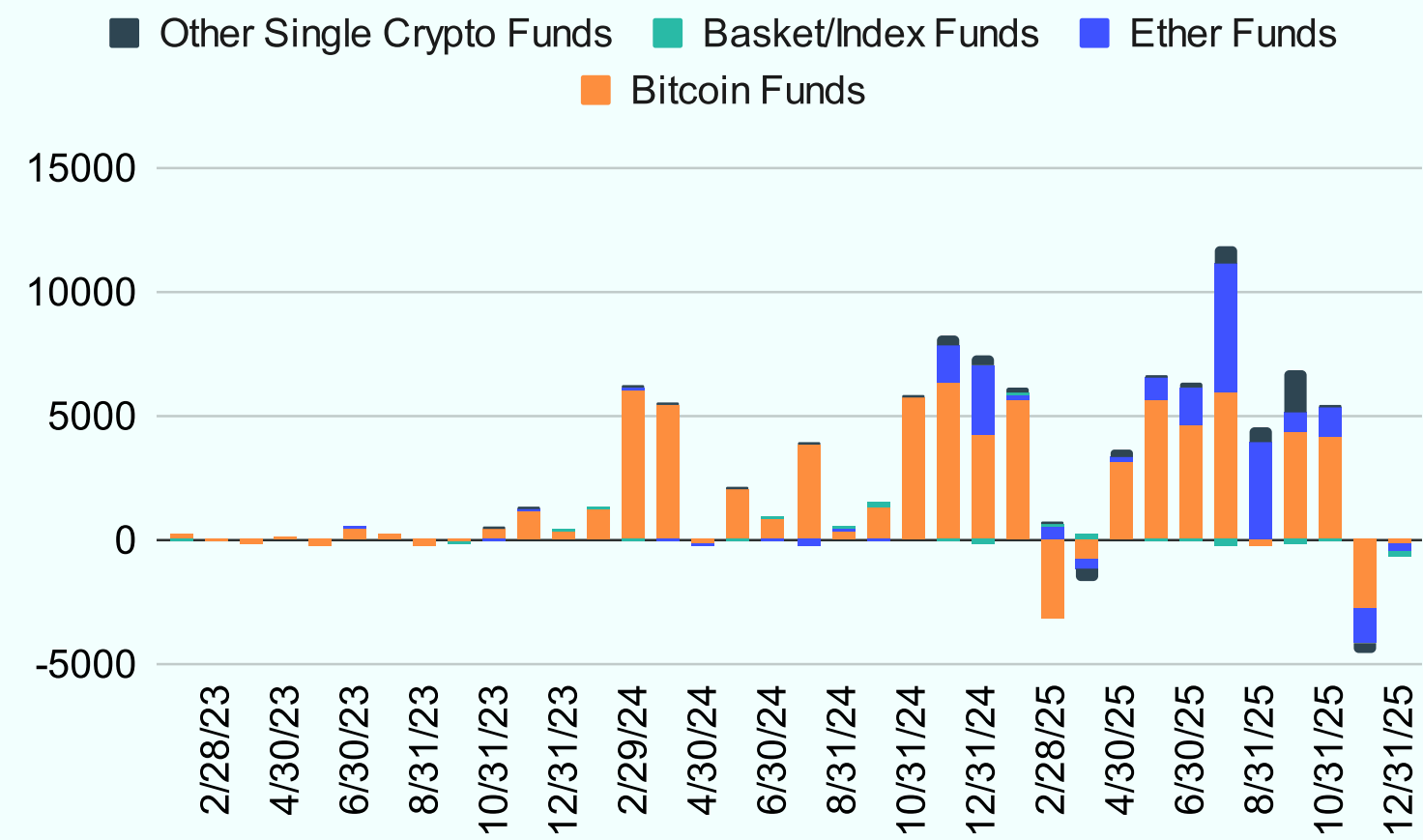
Fantom (FTM) was the weakest performer, down 43.7%, pressured by ecosystem liquidity/TVL erosion. Internet Computer (ICP) fell 25.9%, weighed by lingering a supply unlock overhang. ApeCoin (APE) declined 25.7% as governance uncertainty and ongoing token supply dynamics continued to dampen sentiment.

Investor Activity & Sentiment Positioning

Fund Flows

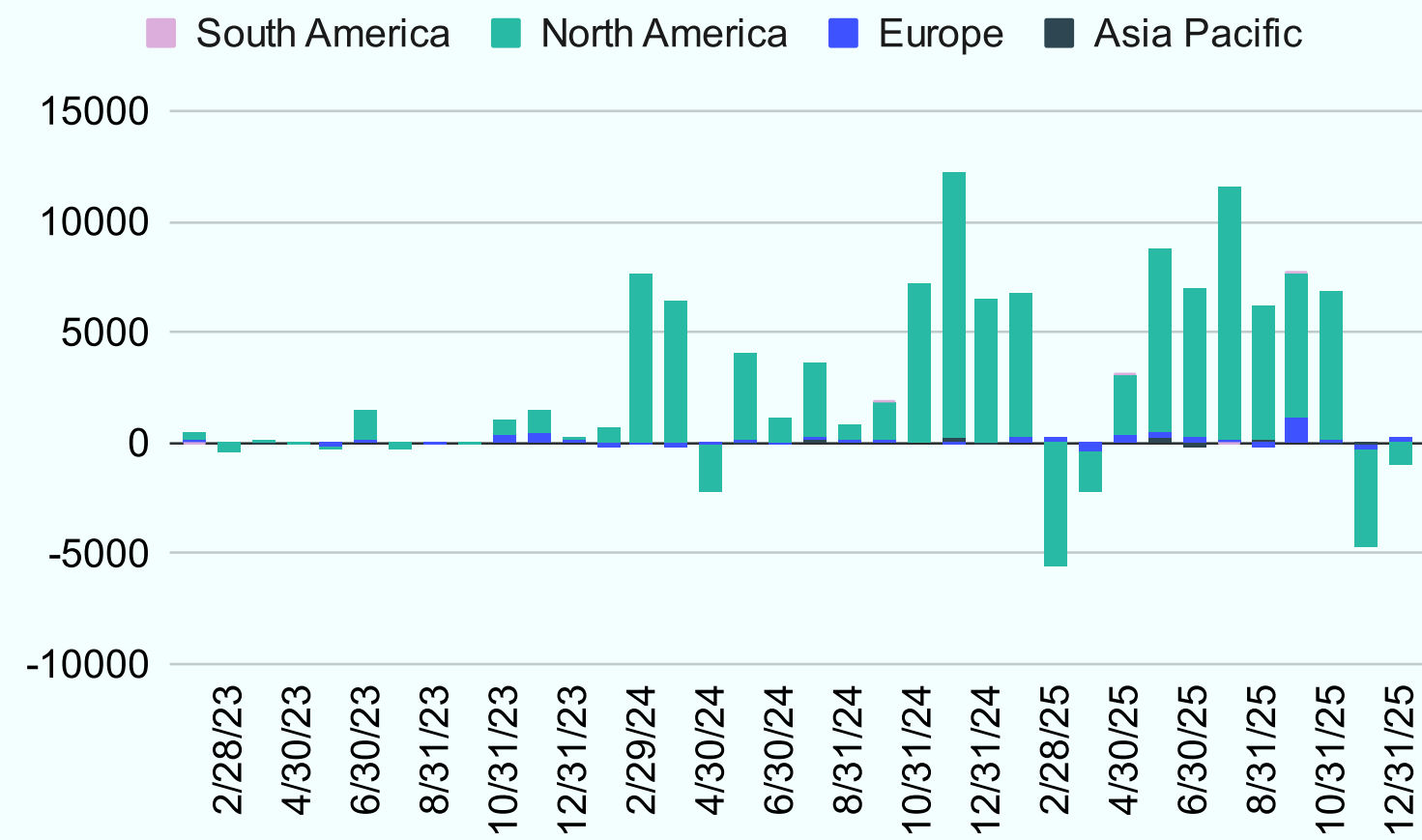
December recorded further outflows from digital asset funds, with investors redeeming approximately \$687 million. Ether accounted for the largest share at \$275 million, while Bitcoin followed at \$204 million. Regionally, North America drove the majority of redemptions at roughly \$985 million, while Europe experienced inflows of \$175 million, underscoring the concentration of selling pressure in U.S. markets.

Fund Flows by Asset (\$m)



Source: CF Benchmarks, Bloomberg, as of December 31, 2025

Regional Fund Flows (\$m)

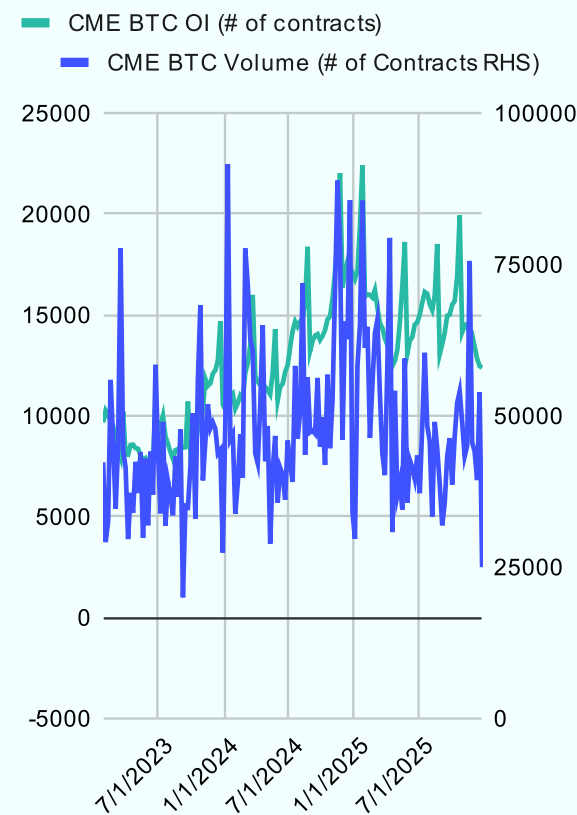


Source: CF Benchmarks, Bloomberg, as of December 31, 2025

Futures Positioning and Open Interest

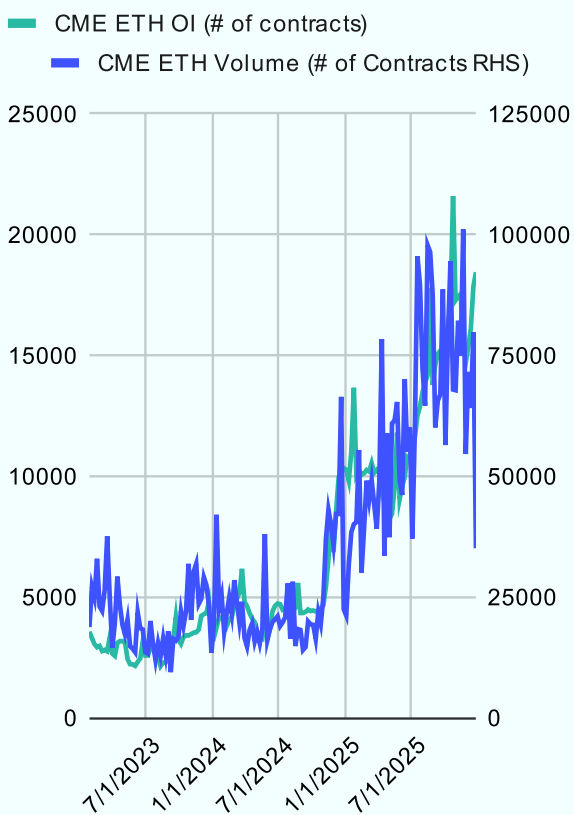
Bitcoin futures saw a modest decline in open interest during November, falling 11.7% from 14,029 to 12,383 contracts. Ether futures recorded a notable increase, with open interest rising 14.9% to 18,452 contracts, despite a modest decline in trading activity that peaked at 79,818 contracts toward month end. Meanwhile, Solana and XRP futures posted smaller changes following November’s pullback. Solana’s open interest rose 5.3% to 11,067 contracts as volumes approached 48,000 contracts, while XRP’s open interest declined 1.3% to 5,671 contracts, with volumes edging modestly higher.

CME Bitcoin Volume and Open Interest



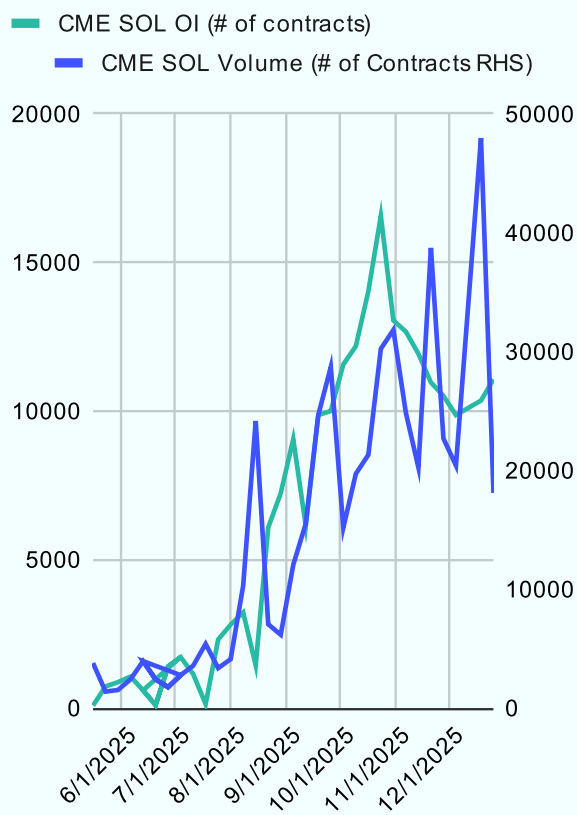
Source: CF Benchmarks, CFTC, Bloomberg,
as of December 31, 2025

CME Ether Volume and Open Interest



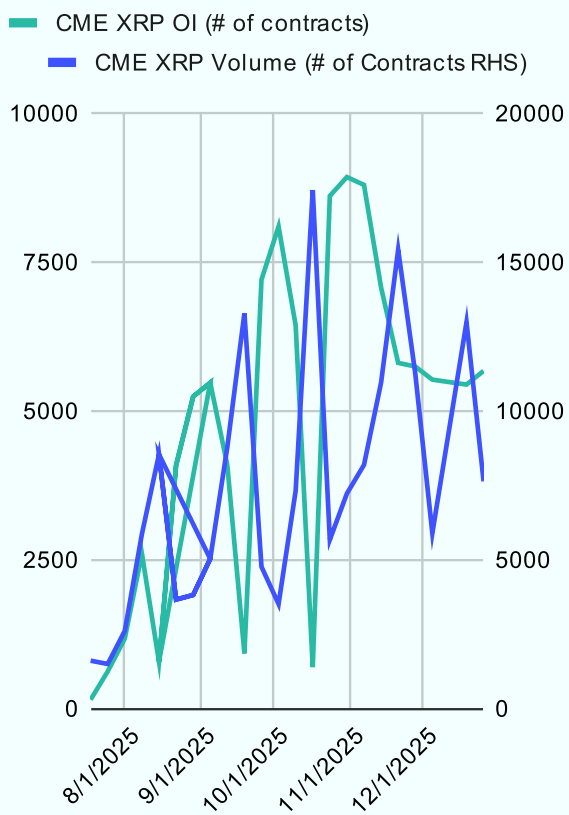
Source: CF Benchmarks, CFTC, Bloomberg,
as of December 31, 2025

CME Solana Volume and Open Interest



Source: CF Benchmarks, CFTC, Bloomberg,
as of December 31, 2025

CME XRP Volume and Open Interest



Source: CF Benchmarks, CFTC, Bloomberg,
as of December 31, 2025

CF Bitcoin Volatility Index (BVX)

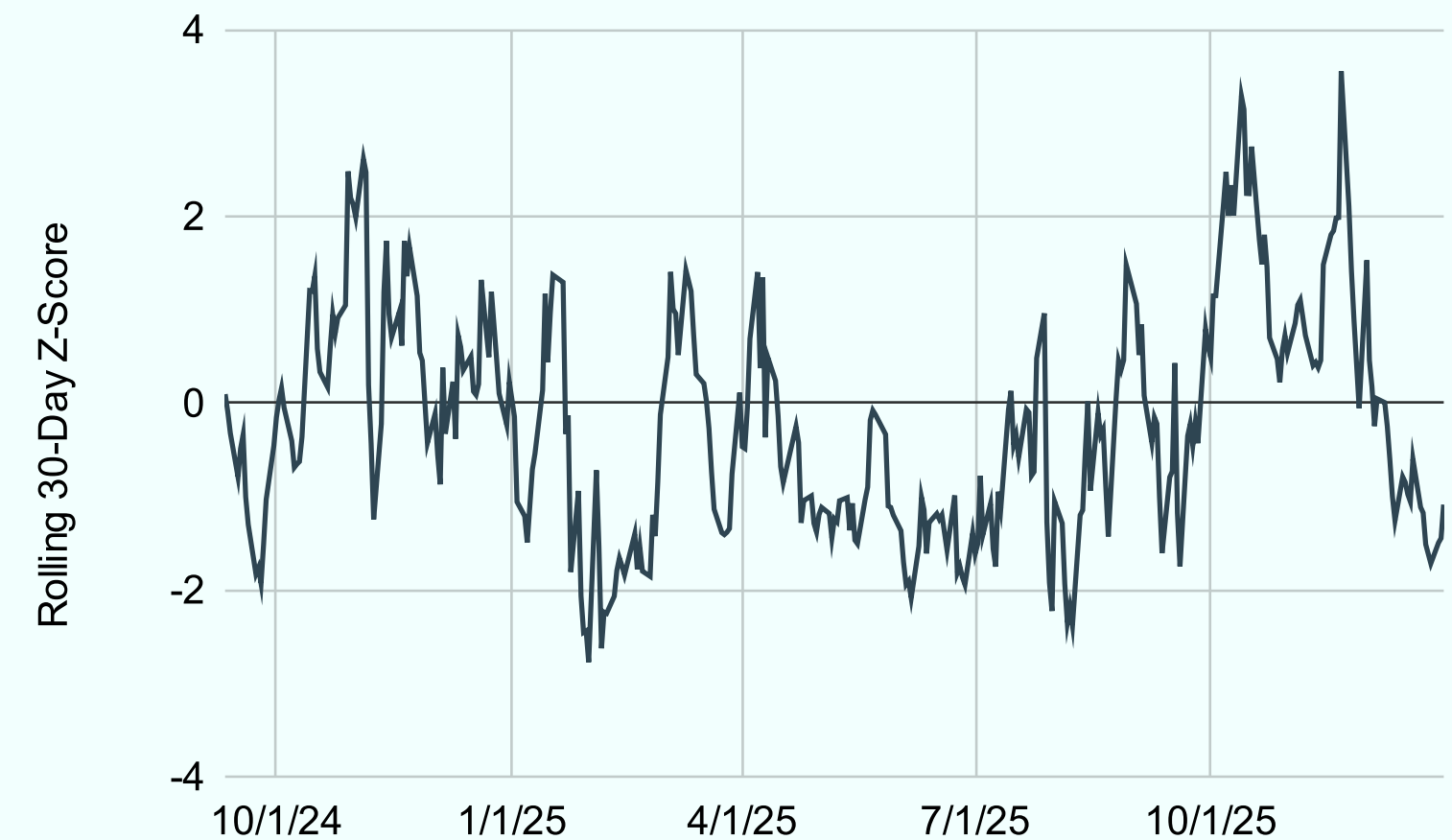
The CF Bitcoin Volatility Index Settlement Rate (BVXS) is a daily benchmark that provides a forward-looking, 30-day constant-maturity measure of implied volatility, derived from CFTC-regulated Bitcoin option contracts traded on the CME. The BVX reflects the fair strike of a variance swap. Over the past month, the BVX ranged between 42.8 and 55.3. During this period, volatility declined significantly, with the BVX recording a -1.7 sigma move (based on our rolling 30-day z-score) late-month.

BVX Index



Source: CF Benchmarks, Bloomberg, as of December 31, 2025

Rolling 30-Day Z-Score



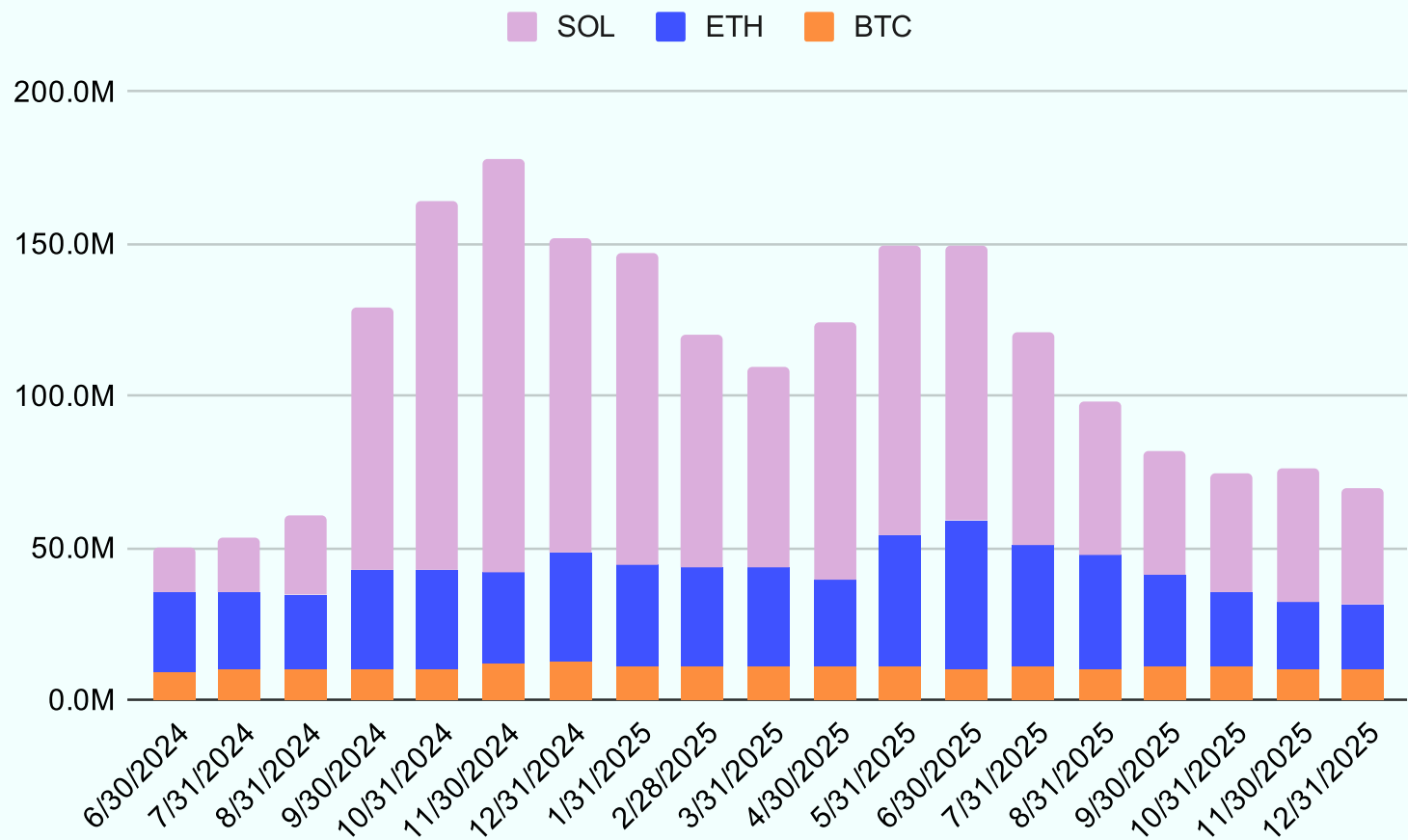
Source: CF Benchmarks, Bloomberg, as of December 31, 2025

Network Fundamentals & Reward Rates

Monthly Active Addresses

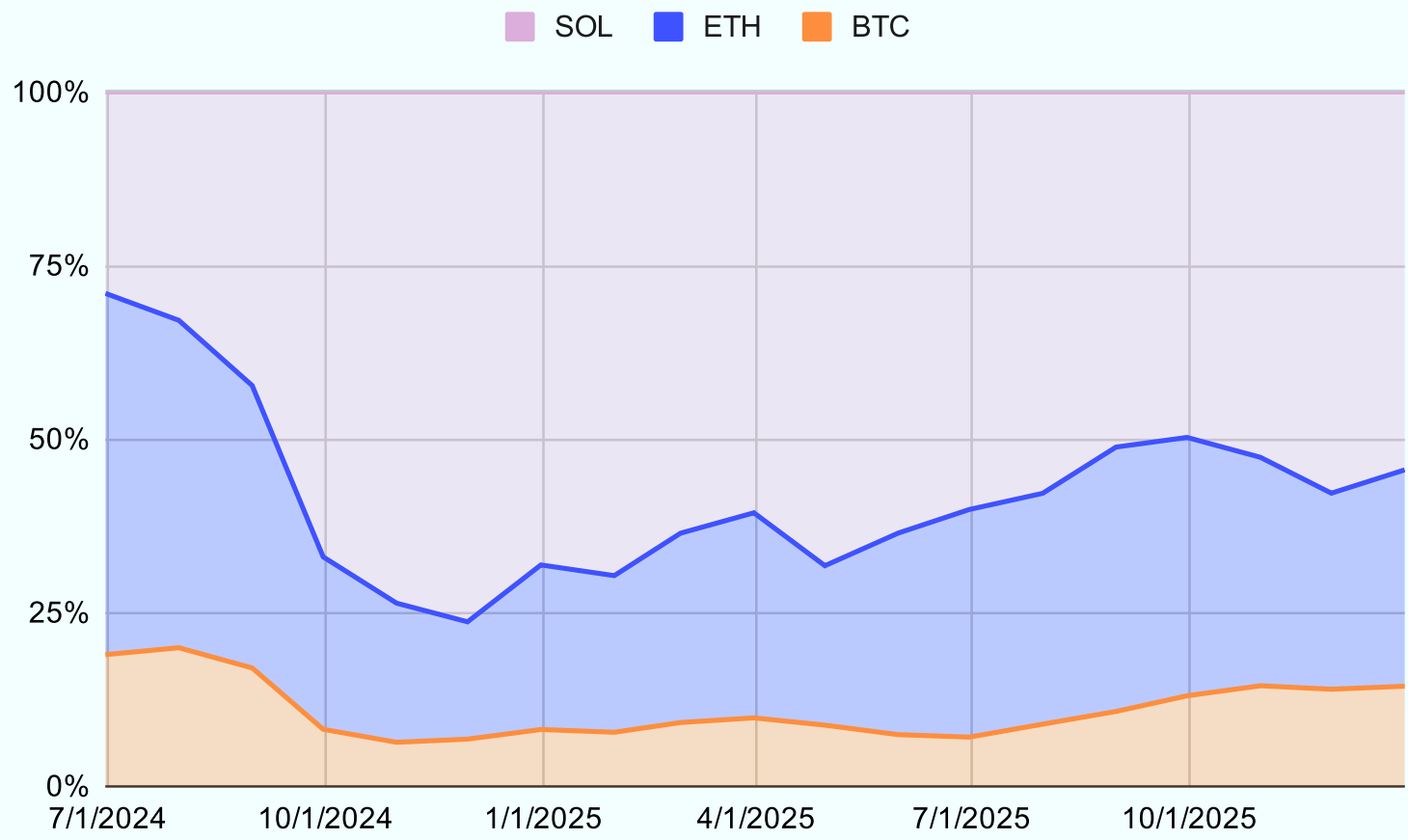
Bitcoin’s active addresses declined slightly in December to approximately 10.1 million, indicating relatively stable network activity. Ethereum recorded steady activity, with active addresses increasing from 21.6 million to 21.8 million (+0.7%). Solana saw a notable decline, with active addresses falling from 44.3 million to 38.1 million (-14.0%).

Active Addresses



Source: CF Benchmarks, Token Terminal, as of December 31, 2025

Share of Active Addresses



Source: CF Benchmarks, Token Terminal, as of December 31, 2025

Total Value Locked (TVL) in DeFi Protocols

Total Value Locked (TVL) in decentralized finance (DeFi) represents the aggregate value of assets deposited across DeFi protocols, expressed in U.S. dollars. It serves as a key indicator of the sector’s overall health and growth. Over the past month, total DeFi TVL increased by 1.2% to approximately \$328 billion, as Ether and Solana began to stabilize following their November pullbacks.

Total TVL



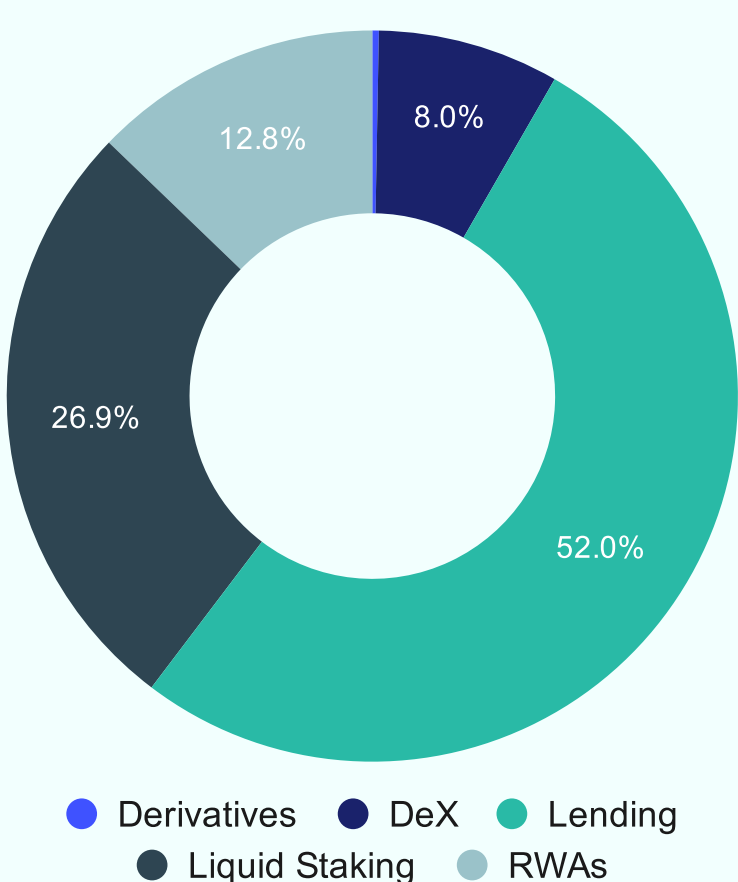
Source: CF Benchmarks, Token Terminal,
as of December 31, 2025

TVL by Chain



Source: CF Benchmarks, Token Terminal,
as of December 31, 2025

TVL By Segment

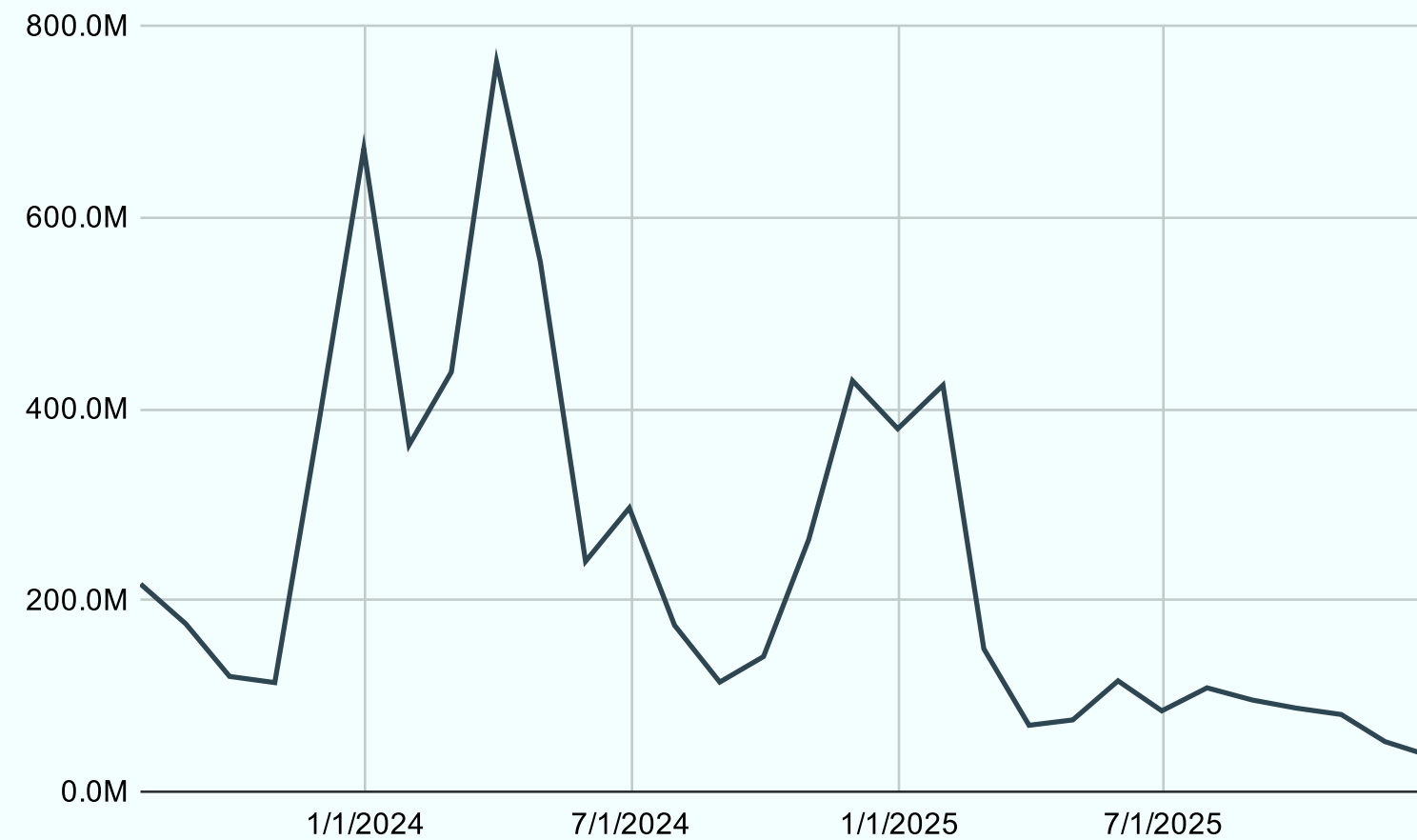


Source: CF Benchmarks, Token Terminal,
as of December 31, 2025

Layer-1 Fee Overview

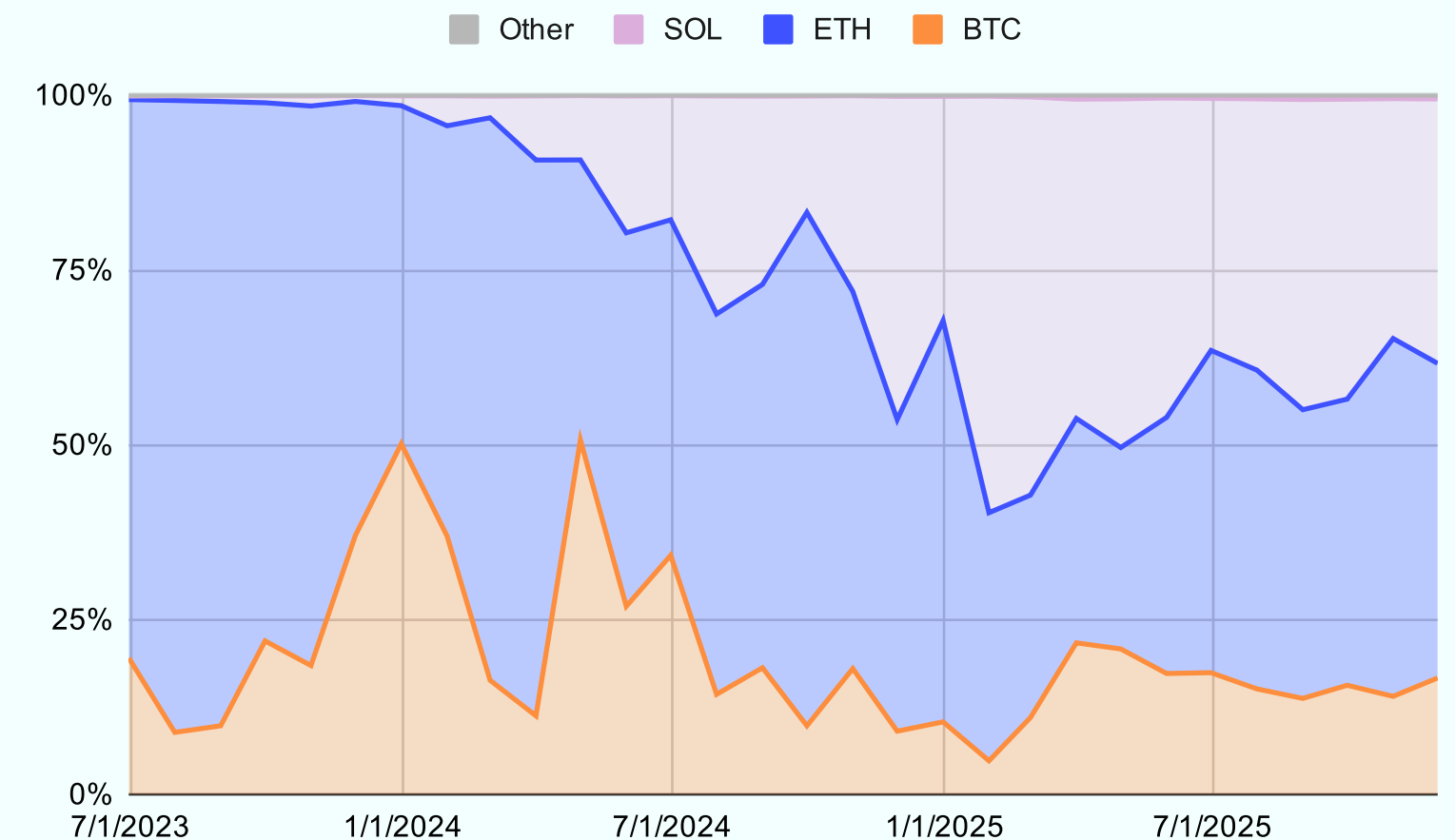
Fees are the charges users pay to record transactions and data on a blockchain and act as a gauge for demand to use these networks. They tend to rise when there is an influx of new users on-chain and can fall when activity wanes or scaling upgrades reduce costs. In December, aggregate layer-1 fees across Bitcoin, Ethereum, and Solana pulled back to \$37.2 million, from \$52.2 million in November. Solana led with a 48.4% share, Ethereum accounted for 30.8%, and Bitcoin contributed 20.1%.

Monthly L1 Fees Paid



Source: CF Benchmarks, Token Terminal, as of December 31, 2025

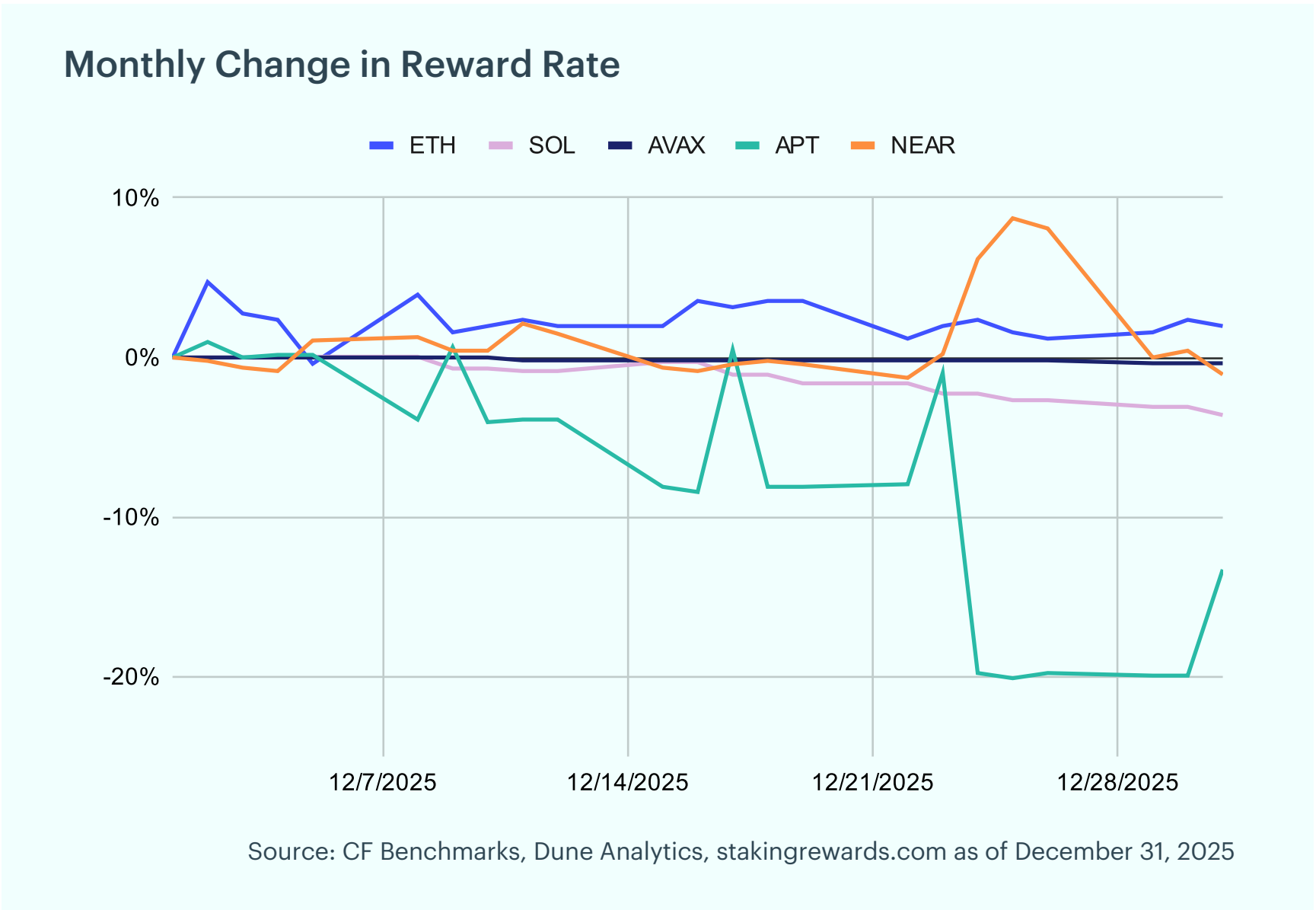
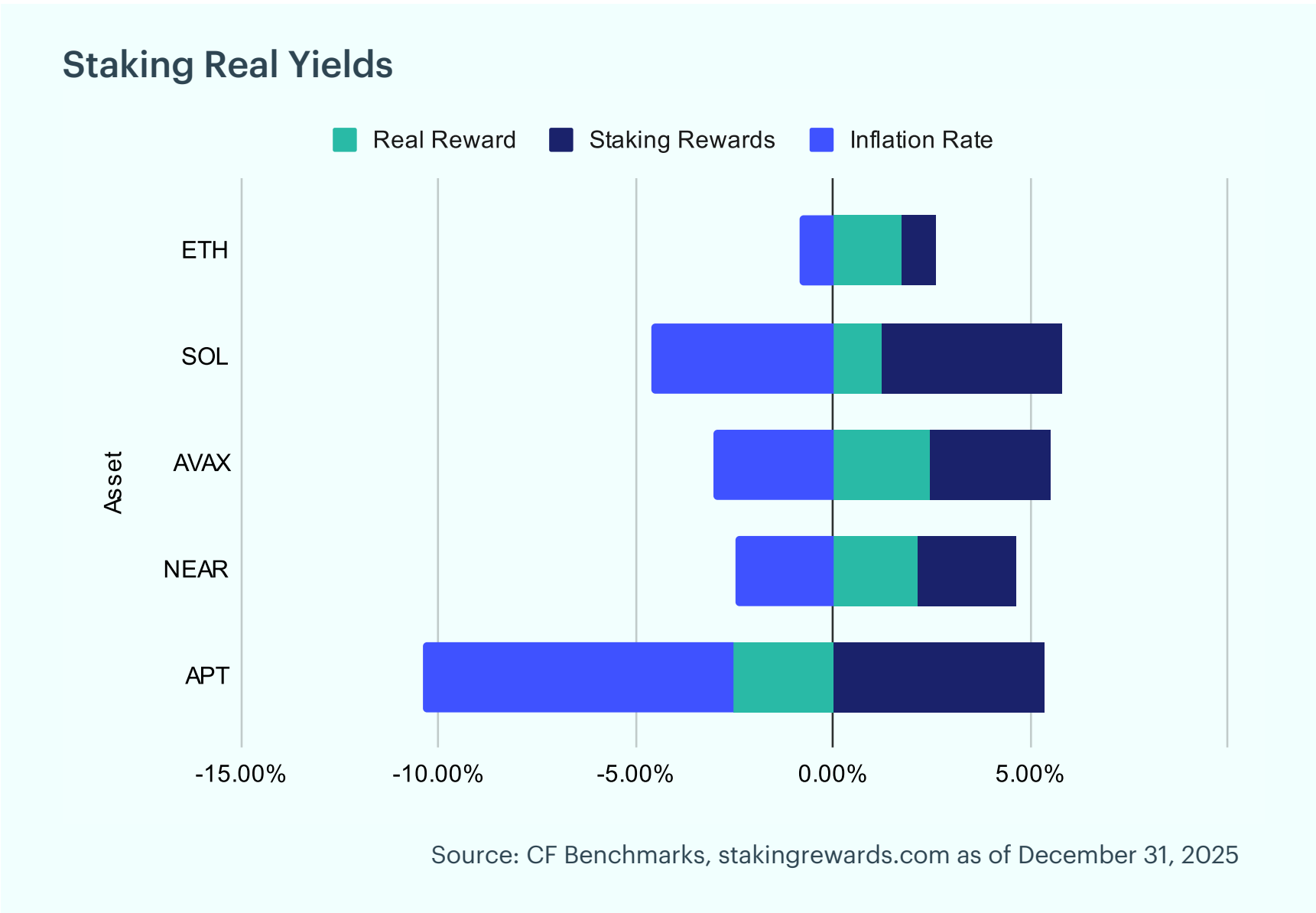
Share of Layer 1 Fees



Source: CF Benchmarks, Token Terminal, as of December 31, 2025
"Other" Represents the sum of the fees on Cardano, DOGE, Sui, and XLM

Staking Rewards & Inflation Rates

The reward rate in a Proof-of-Stake (PoS) blockchain is the annual return validators earn for staking, typically expressed as a percentage. It depends on factors such as total staked tokens, network yield, and protocol incentives. Inflation and staking participation strongly influence real returns: higher inflation raises nominal rewards but dilutes token value, while greater staking participation reduces individual yields yet strengthens network security and decentralization.



CF Staking Reward Rates as of 31st December

ETH	SOL	AVAX	APT	NEAR
2.59%	5.82%	5.51%	5.35%	4.68%

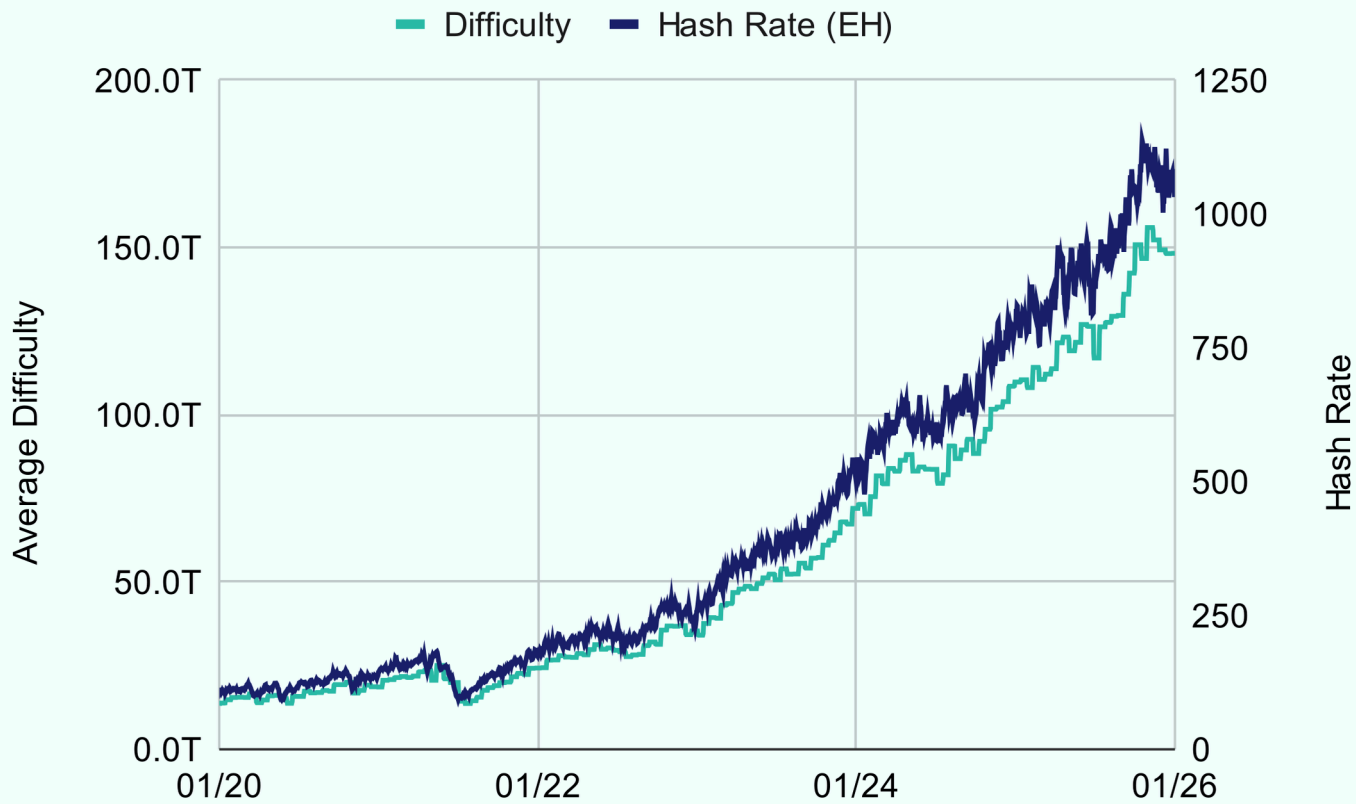
Mining Metrics

Bitcoin's Hash Rate & Mining Revenue

Bitcoin's hash rate continued to decline in December, slipping 5.4% to 1,031 exahashes per second. Mining difficulty, which measures the computational effort required to mine a new block and adjusts to maintain consistent block times, decreased by 1.6% following a period of slower block production in early December. The next difficulty adjustment, expected in the first week of Janaury, is currently projected to be a 1.5% decrease.

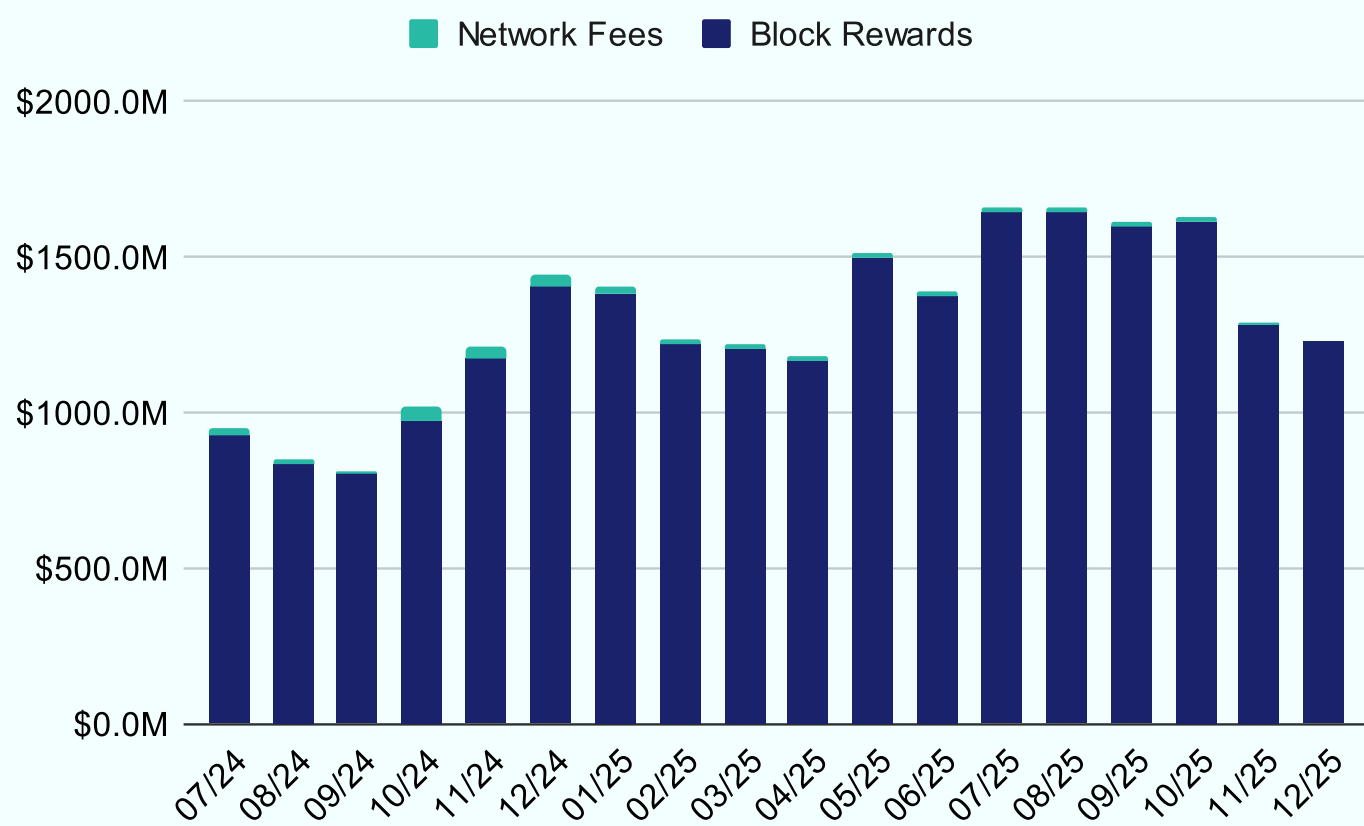
Bitcoin miners saw a 4.7% decrease in revenue in December. Of the total rewards earned during the month, 0.6% came from transaction fees, down from 0.7% in November. The slight decline in revenue was driven primarily by Bitcoin's price movements during the period.

Hash Rate and Difficulty



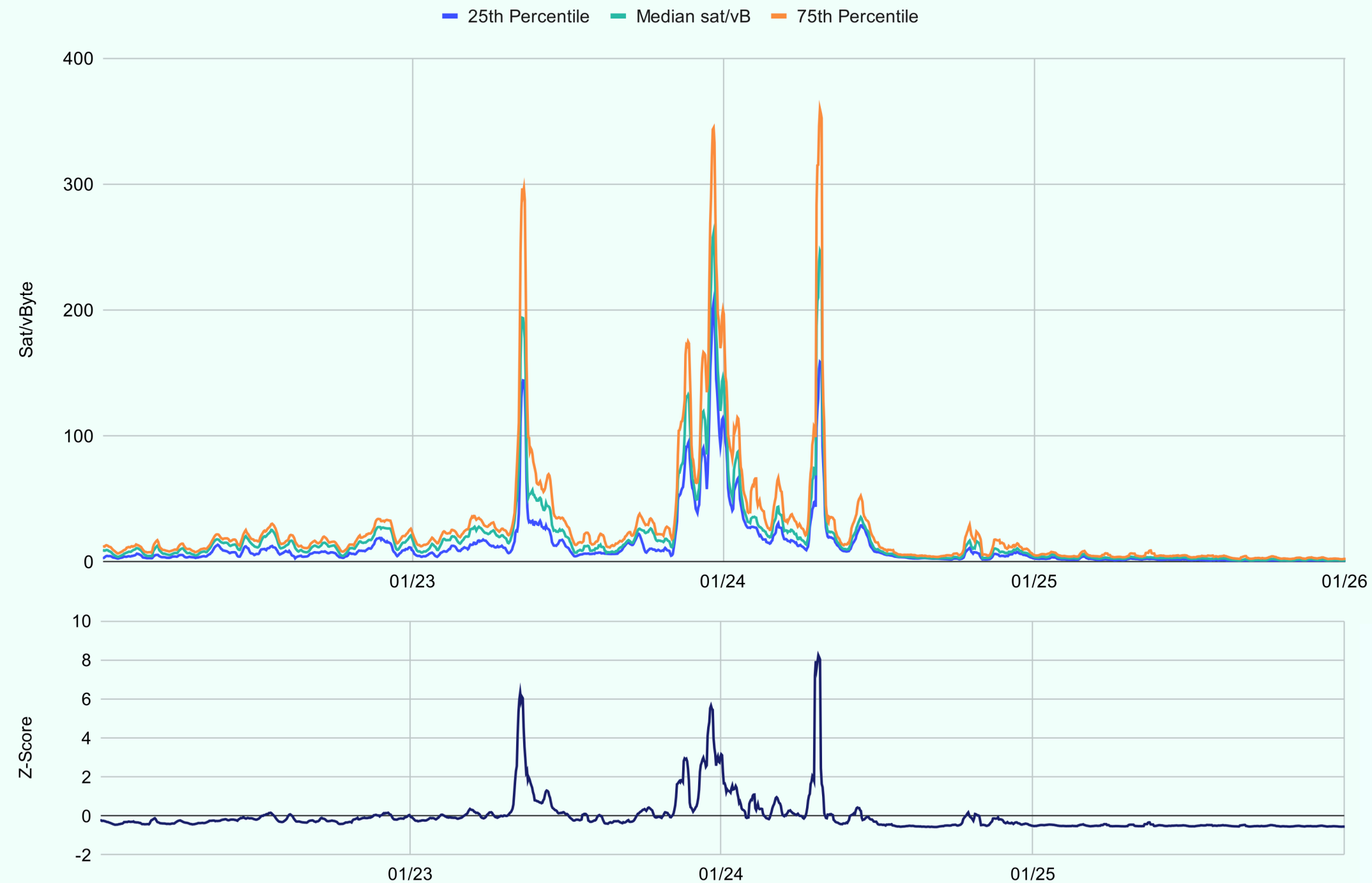
Source: CF Benchmarks, Dune Analytics as of December 31, 2025

Bitcoin Mining Revenues by Month



Source: CF Benchmarks, Dune Analytics as of December 31, 2025

Bitcoin Network Fees



Source: CF Benchmarks, Dune Analytics, as of December 31, 2025

- As Bitcoin's block subsidy decreases, network fees make up a larger share of miners' revenue. The behavior of these fees, especially during periods of high demand for block space, can provide insights into the sustainability of fee increases.
- The data shows that during periods of high demand, the 75th percentile transaction fees surge significantly higher than the median and 25th percentile fees, indicating a subset of transactions paying much higher fees to ensure prompt inclusion in blocks.
- When the Z-score of the interquartile range exceeds 2, it signals substantial increases in the 75th percentile relative to the 25th percentile, highlighting times of significant network congestion and temporarily elevated fees.

Bitcoin Mining Matrix

- The following sensitivity table illustrates the revenue a miner will generate per megawatt hour consumed at the current difficulty, considering different levels of miner efficiency and varying Bitcoin prices, providing a comprehensive view of potential earnings under different market conditions. The table is color-coded to reflect profitability based on the 10th percentile industrial electricity rate in the United States of \$64.70 per MWh, as reported by the EIA in October 2025.
- This table helps miners compare revenues under various operational conditions, aiding in evaluating the useful life of their equipment. By comparing projected revenues at different Bitcoin prices to electricity costs, miners can determine whether they can continue running their current fleet or if they need to upgrade to maintain profitability.
- As income per MWh increases, miners are more likely to fund additional capital expenditures, which can increase the overall network hashrate. However, this increase in hashrate can subsequently reduce the income each individual miner earns.

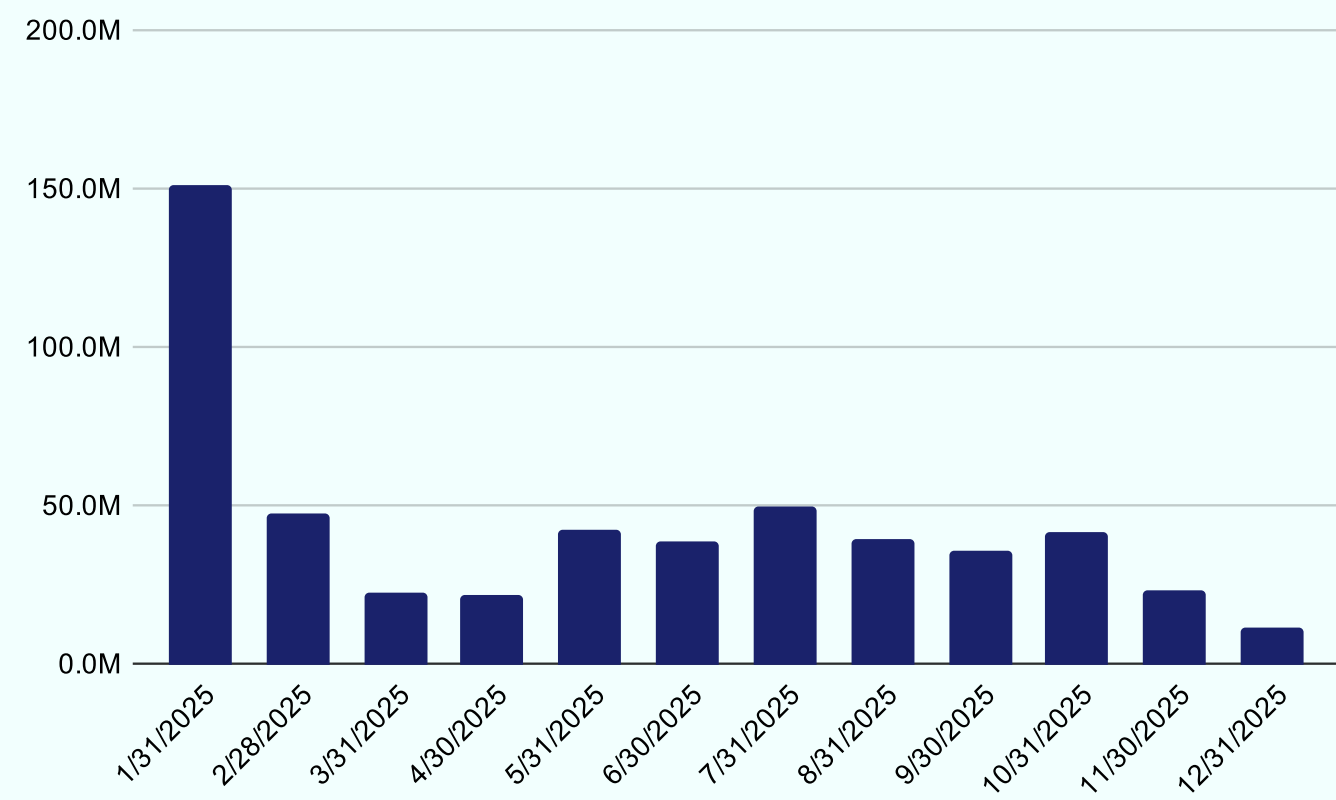
		Bitcoin Price (USD)								
Efficiency (Watts /TH)		\$74,434.09	\$78,351.67	\$82,475.44	\$86,816.25	\$91,385.53	\$95,954.81	\$100,752.55	\$105,790.17	\$111,079.68
	29.5	\$44.51	\$46.85	\$49.32	\$51.91	\$54.65	\$57.38	\$60.25	\$63.26	\$66.42
	24	\$54.71	\$57.59	\$60.62	\$63.81	\$67.17	\$70.53	\$74.05	\$77.76	\$81.65
	21.5	\$61.07	\$64.29	\$67.67	\$71.23	\$74.98	\$78.73	\$82.67	\$86.80	\$91.14
	18.5	\$70.98	\$74.71	\$78.64	\$82.78	\$87.14	\$91.50	\$96.07	\$100.87	\$105.92
	17.5	\$75.03	\$78.98	\$83.14	\$87.51	\$92.12	\$96.72	\$101.56	\$106.64	\$111.97
	15	\$87.54	\$92.14	\$96.99	\$102.10	\$107.47	\$112.85	\$118.49	\$124.41	\$130.63
	13.5	\$97.26	\$102.38	\$107.77	\$113.44	\$119.41	\$125.38	\$131.65	\$138.24	\$145.15
	9.5	\$138.22	\$145.49	\$153.15	\$161.21	\$169.69	\$178.18	\$187.09	\$196.44	\$206.26

Network & On-chain Updates

Ethereum Revenue Dashboard

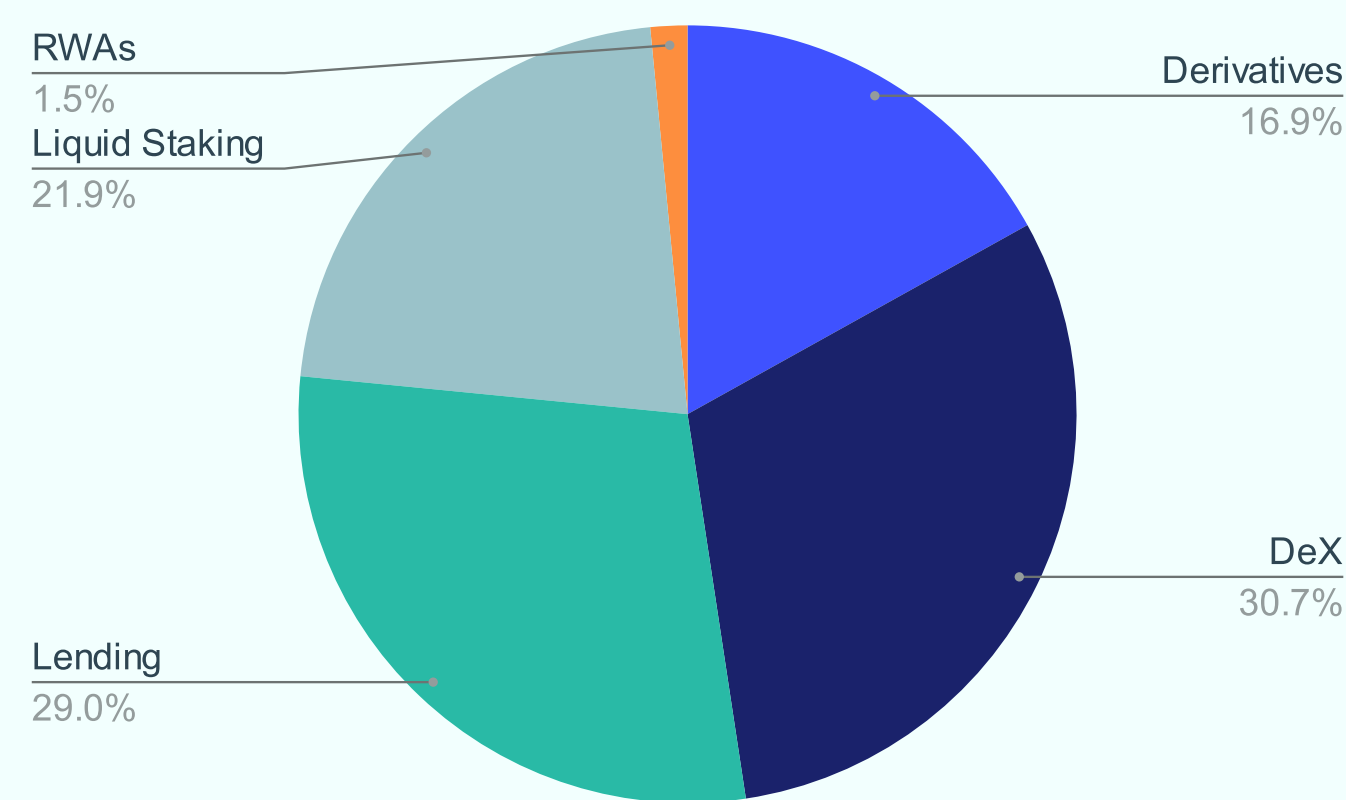
Analyzing Ethereum’s total fees and their sector composition provides insight into the use cases driving network revenue. Ethereum layer-1 fees dropped 51.2% month-over-month, falling to \$11.5 million in December from \$23.6 million in November. Decentralized exchanges accounted for the largest share at 30.7%, followed by lending protocols at 29.0% and liquid staking at 21.9%. Derivatives contributed 16.9%, while real-world asset tokenization represented just 1.5%, underscoring the continued dominance of DEX activity in network fee generation.

Trailing Twelve Month Fees, ETH



Source: CF Benchmarks, Dune Analytics as of December 31, 2025

Fees by Sector

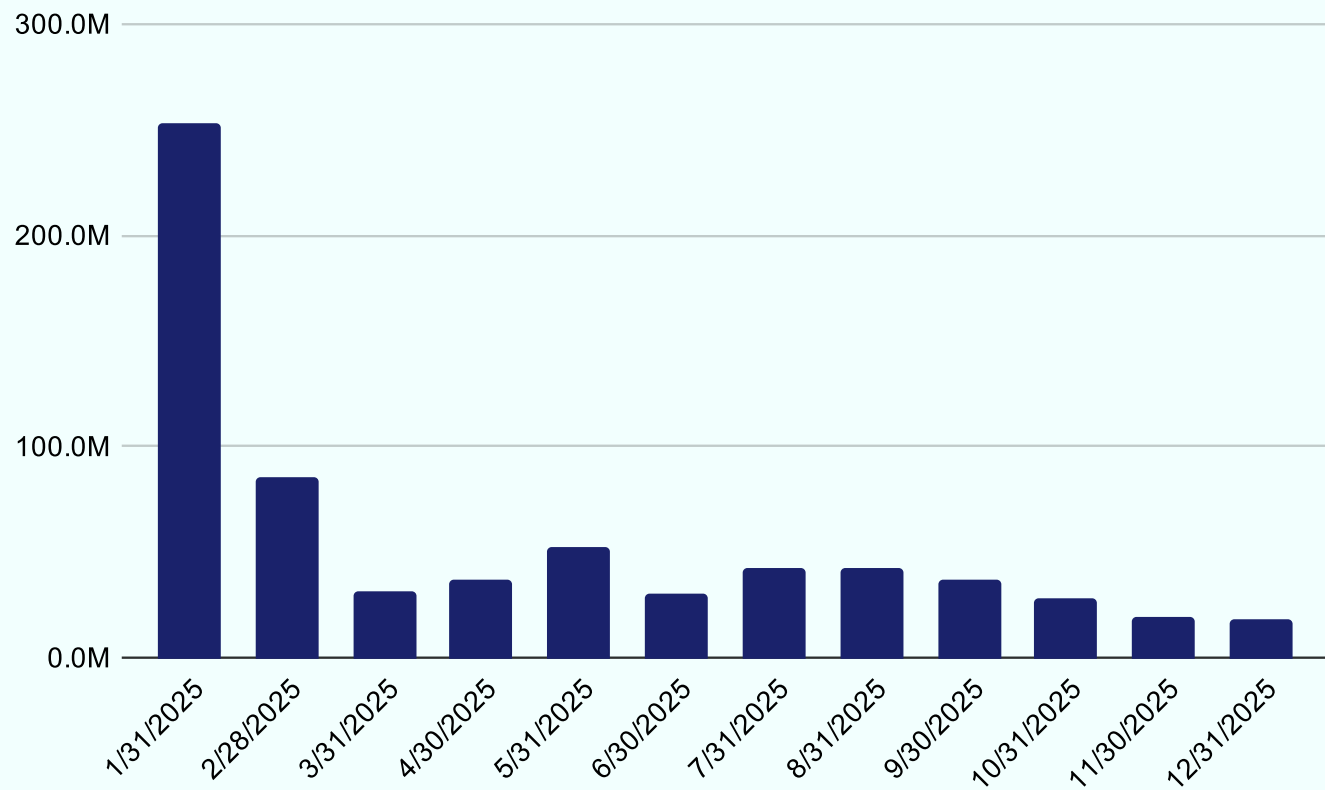


Source: CF Benchmarks, Dune Analytics as of December 31, 2025

Solana Revenue Dashboard

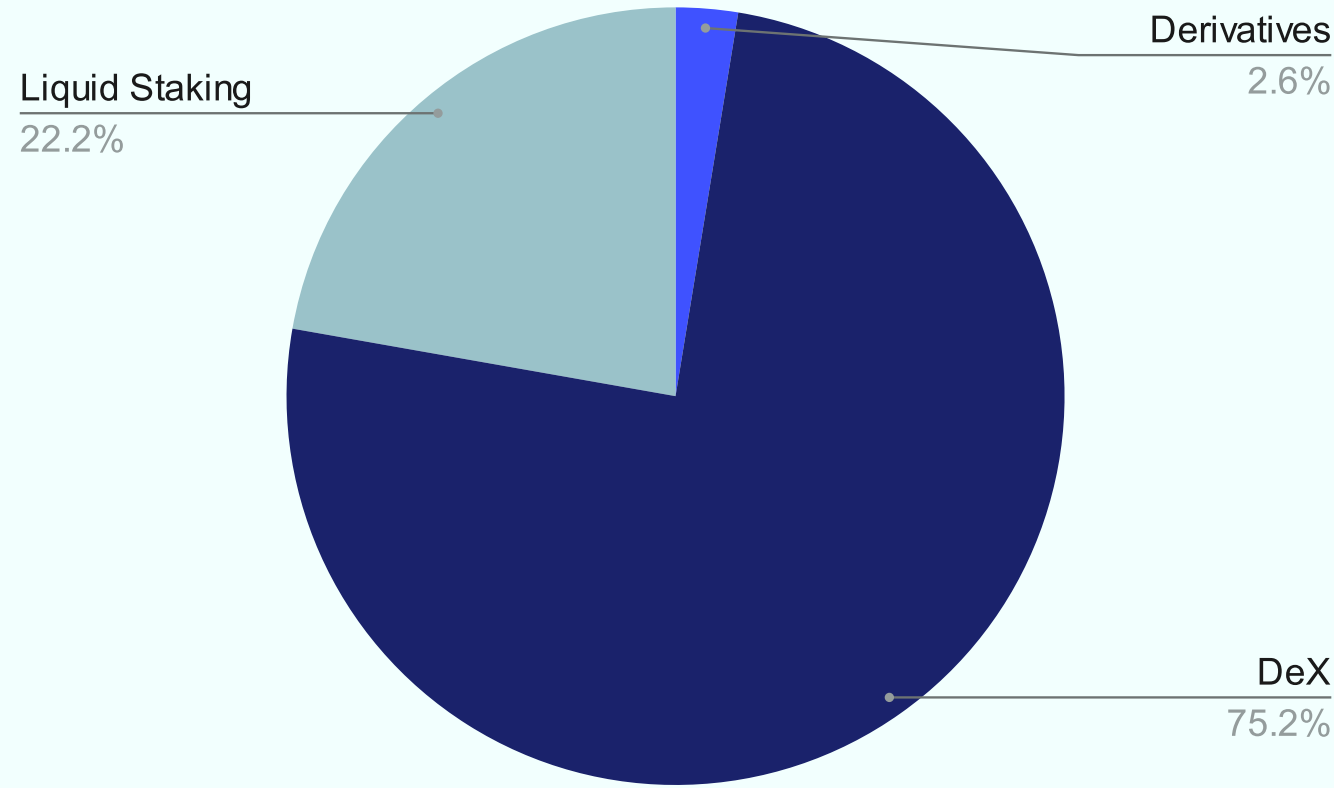
Similar to Ethereum, examining Solana’s fee revenue and its sector composition helps identify the applications driving network demand and value capture. In November, Solana’s layer-1 fees declined 8.7%, falling from \$18.7 million to \$19.8 million. Decentralized exchanges generated the majority of fee revenue at 75.2%, while liquid staking and derivatives contributed 22.2% and 2.6%, respectively.

Trailing Twelve Month Fees, SOL



Source: CF Benchmarks, Dune Analytics as of December 31, 2025

Fees by Sector



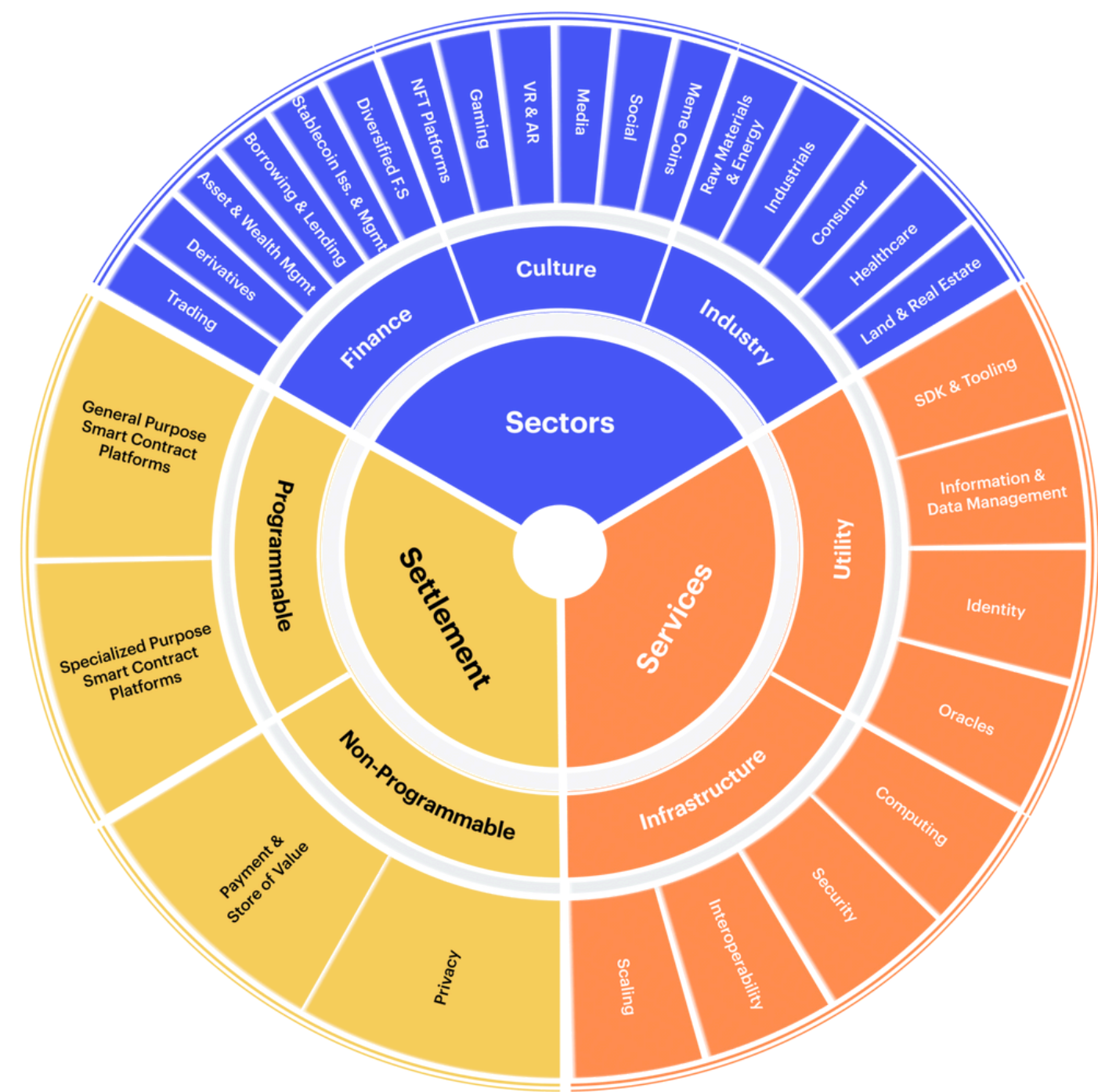
Source: CF Benchmarks, Dune Analytics as of December 31, 2025

Appendix

CF Digital Asset Classification Structure

CF Digital Asset Classification Structure

The CF Digital Asset Classification Structure (CF DACS) classifies coins and tokens based on the services that the associated software protocol delivers to end users, grouping assets by the role they play in delivering services to end users. The CF DACS powers CF Benchmarks' sector composite and category portfolio indices and allows users to perform attribution analysis to better understand the fundamental drivers of returns within their digital asset portfolios.



Additional Resources

Index Resources

For more information about our CF Benchmark indices and our methodologies, please visit the respective web links below:

- [CF Diversified Large Cap Index](#)
- [CF DeFi Composite Index](#)
- [CF Web 3.0 Smart Contract Platforms Index](#)
- [CF Digital Culture Composite Index](#)
- [CF Cryptocurrency Ultra Cap 5 Index](#)
- [CF Broad Cap Index Market Cap Weight](#)
- [CF Broad Cap Index Diversified Weight](#)

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info@cfbenchmarks.com

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