

Staked | Kraken



The State of Staking

Q2 | 2023

\$288 BN (49% Q/Q)

Market Cap of Top 35 PoS Assets

\$68 BN (61% Q/Q)

Value of Staked Assets

\$5 BN (66% Q/Q)

Annualized Staking Rewards

23% (2% Q/Q)

PoS Share of Total Crypto Market Cap

11.6% (0% Q/Q)

Average Yield

Crypto Rebounds Sharply Amid Bank Failures and Regulatory Crack Down

Despite a challenging macro environment, the closure of several systemically important crypto banks, and regulatory action against industry leaders, the crypto market started 2023 with a bang. This after the FTX implosion dragged the market to a multi-year low in Q4 2022. Crypto assets increased by ~ 50%+ Q/Q across the board, reaching their highest levels in the last year. Driven by regulatory action against Binance's bUSD and US bank failures, stablecoins were the only asset class to buck the positive trend. Stablecoins shed another \$7BN Q1 2023, after losing \$11BN in Q4 2022.

Amidst multiple bank failures around the world, there was a flight to hard assets and safety as investors gravitated to Bitcoin, gold and short-dated US treasuries. Bitcoin increased in value by 70% in the quarter, outpacing the total crypto market's quarterly gain of 49.2%. Ethereum benefited from excitement about the Shapella forks. As the last step in a 2+ year migration, investors viewed the forks as the final de-risking event in Ethereum's transition to proof-of-stake.

| \$BN | Q1 2023 MARKET CAP | Q/Q% | Y/Y% |
|---------------------|--------------------|------|------|
| Total Crypto Market | \$ 1,235 | 49% | -45% |
| Top 35 PoS Assets | \$ 288 | 51% | -57% |
| Top 4 Stablecoins | \$ 125 | -6% | -22% |
| Bitcoin | \$ 542 | 70% | -39% |
| Ethereum | \$ 216 | 49% | -47% |

Source: Market capitalizations per CoinGecko on the last day of the quarter (e.g. 09/30/22 or 12/31/22).

The average staking yield remained unchanged at 11.6%. The Ethereum yield increased by 60 bps from 5.2% to 5.8%, as increased transaction fees + MEV offset lower consensus rewards. Ethereum's stake rate reached a high of 14.5% just prior to the Shapella forks on 04/12/23.

Staking yields continued to compress at the high end, with no staking yield exceeding 25%. This is likely the result of further industry maturation. As is common, Polkadot and Cosmos were outliers at the high end, offering staking yields of 15.3% and 21.9%, respectively.

The average stake rate decreased by 520 bps to 44.7%, though this was likely the result of changes to the Top 35 PoS index composition. For example, the Top 35 PoS index included Flare (8%) and Canto (24.5%) for the first time, whereas previously listed assets had stake rates of 60%+.

With un-staking and withdrawals finally live on Ethereum, we expect the ETH stake rate to increase from ~ 15% today, to the 20 - 35% range in the next 12 - 18 months (limited only by the rate limit on new validators). We also expect the average stake rate to trend back to towards 50% over time.

The sharp rebound in asset prices led to a resurgence in the value of staked assets and annualized staking rewards. Staked asset values returned to their highest levels in a year, growing 61% quarterly. However, they remain ~ 60% off their all-time highs set at the end of 2021. Annualized rewards were just shy of \$5BN, their highest level since Q3 2022, though still down 66% from their high of ~ \$15BN a year ago.

With a market cap of ~ \$216BN, a yield of 5.8% and a stake rate of 14.5%, Ethereum generates ~ \$1.8BN in annual staking rewards, or ~ 36% of the PoS market's total. This despite accounting for ~ 75% of the PoS market capitalization. As outlined above, we expect positive trends in the ETH stake rate to drive significant growth in the value of staked assets and annualized staking rewards.

| \$BN | Q1 2023 | Q4 2022 | Q3 2022 | Q2 2022 | Q1 2022 |
|----------------------------|---------|---------|---------|---------|----------|
| Average Staking Yield | 11.6% | 11.6% | 13.0% | 14.6% | 15.4% |
| Average Stake Rate | 44.7% | 49.9% | 50.4% | 48.6% | 49.3% |
| Staked Assets | \$ 68.0 | \$ 42.0 | \$ 62.9 | \$ 49.4 | \$ 170.3 |
| Annualized Staking Rewards | \$ 4.9 | \$ 2.9 | \$ 5.0 | \$ 3.9 | \$ 14.9 |

Source: Staking yield and stake rate data per on-chain block explorers. Market capitalizations per CoinGecko. The staked assets value is calculated by multiplying the market capitalization and stake rate for each protocol on the last day of the quarter (e.g. 09/30/21 or 12/31/21). Annualized staking rewards is calculated by multiplying the market cap, stake rate and staking yield for each protocol on the last day of the quarter.

Excluding Bitcoin, PoS market share rebounded by 410 basis points from an all-time low in Q4, to 41.4% in the quarter, its highest level in a year. The share gain was the result of stablecoin share losses, as explained above. Ethereum's PoS dominance remained largely unchanged at 75.1%, although the ETH / BTC market cap ratio dropped by 540 basis points in the quarter.

| | Q1 2023 | Q4 2022 | Q3 2022 | Q2 2022 | Q1 2022 |
|-------------------|---------|---------|---------|---------|---------|
| PoS Market Share | 23% | 23% | 24% | 22% | 30% |
| ETH PoS Dominance | 75% | 76% | 68% | 65% | 61% |

Source: Market capitalizations per CoinGecko on the last day of the quarter (e.g. 09/30/22 or 12/31/22).

Aptos continued its rapid ascent up the PoS ranks. After debuting at #16 in PoS assets with a \$440M market cap last quarter, Aptos broke into the top 10 this quarter with a market cap of \$2BN. Stacks also enjoyed a jump in the ranks. It drafted on Bitcoin NFT momentum to climb from #22 in PoS assets with a market cap of \$292M to just outside the top 10 at #12 with a market cap of \$1.3BN this quarter. Solana rebounded with strength, climbing back from #22 to #11 in the overall crypto asset rankings this quarter.

Successful Transition to PoS Drives Significant Increase in ETH Staking Demand

On April 12th at ~ 6:30 PM EST, the Ethereum network upgraded via the Shanghai and Capella ("Shapella") hard forks. The forks enable transfers between Ethereum's consensus and execution layers. This makes it possible to access staking rewards, exit from the validator set, or un-stake and withdraw funds.

The Shapella forks were the capstone on a 2.5 year migration to proof-of-stake, a vision outlined in the original Ethereum whitepaper. The forks also marked the final de-risking event for Ethereum staking. With un-staking and withdrawal functionality live, previously sidelined institutional investors can finally stake their ETH.

According to TokenUnlocks (1), there has been 1.97M ETH un-staked as of May 2, or three weeks post-Shapella. In the same timeframe, there has been 1.65M ETH staked, **leading to a net change of -320,000 ETH, or less than 2%.** As a result of the recent settlement with the SEC, Kraken was responsible for a majority of the early un-staking activity. Coinbase and Binance have been responsible for most of the more recent un-staking activity.

After submitting an exit transaction, the validator enters the exit queue. There is a protocol level limit to the amount of validators that can exit the validator set per epoch. Excess validators must remain in the exit queue on a first in, first out basis. If demand to un-stake is high, voluntary exits may take days or weeks for the protocol to process. **After reaching a high of 10+ days, the exit queue is currently only ~ 3 hours long.** Although LIDO, which accounts for ~ 30% of ETH staking, hasn't enabled un-staking yet, it's remarkable for the exit queue to be ~ zero less than a month post Shapella. This dispels any concerns about an un-staking spiral jeopardizing chain security as a result of Shapella. After the exit queue, there is a fixed 27 hour waiting period until a validator is un-staked.

Footnotes:

(1) <https://token.unlocks.app/ethereum-shanghai>

After a validator has been un-staked, it enters a withdrawal cycle. This cycle can currently take up to ~ 5 days. It can take less than ~ 5 days depending on when the validator enters the cycle. Once the validator finishes the cycle, the 32 ETH stake and all rewards will be available using the new credentials. Based on the exit queue of ~ 3 hours plus the 27 hour waiting period and 2 - 5 day withdrawal cycle, **it currently takes ~ 3 - 6 days to fully un-stake.**

Per Beaconchain, as of April 12th, there were 18,013,670 ETH staked and a total ETH supply of 120,418,643, or a stake rate of 14.9%. As of May 2nd, there were 17,972,773 ETH staked and a total ETH supply of 120,369,781, or a stake rate of 14.9%. So while the amount of staked ETH decreased from withdrawals, it was offset by burned ETH. **A stake rate of 14.9% is well below the average stake rate of 44.7% for the Top 35 PoS Assets.**

Post-Shapella, there has been a significant increase in staking activity. Total ETH deposits during the week ending 05/02 were ~ 4x higher than the stake added in the week before Shapella. Average daily deposits now are 6.5x higher than in April. There was more ETH staked in the six days after Shapella (750k) than the entire month of March (600k). As a result of the spike in staking demand, the activation queue is currently ~ 12.5 days. For comparison, there was no queue in the days leading up to Shapella. **Based on this increase in staking demand, we expect the ETH stake rate to increase from ~ 15% today, to the 20 - 35% range in the next 12 - 18 months.**

Full Slate of PoS Protocol Launches in 2023

Staked plans to support 10+ new PoS blockchains in 2023. Threshold, Flare and Liquid Collective already had successful launches in Q1. SUI's mainnet genesis was on 04/13/23 and official public launch on 05/03/23. The Celestia launch and dydx's transition to a Cosmos-based PoS chain are hotly anticipated events for the second half of the year.

| CHAIN | LAUNCH | FOCUS |
|---------------------|------------|---|
| Q1 | | |
| Threshold | 01/09/23 | TBTC v2 + proxy re-encryption |
| Flare | 01/10/23 | EVM-based layer 1 chain |
| Liquid Collective | 03/07/23 | Enterprise-grade liquid staking |
| Q2 | | |
| SUI | 05/03/23 | Cheap and fast layer 1 via Facebook Libra |
| Chainflip | 06/30/23 E | Cross-chain automated market maker |
| 2H | | |
| Rarimo | 07/31/23 E | Multi-chain protocol for NFTs |
| dydx | 09/30/23 E | Decentralized derivatives market |
| Celestia | TBD | Module blockchain system |
| SEI | TBD | DEX optimized layer 1 |
| Hyperlane (Staking) | TBD | Cross-chain messaging protocol |

Source: Estimated launch dates based on public information from protocol Discords and other announcement channels.

Please contact sales@staked.us if you are interested in staking for any of the protocols listed in the 2023 launch calendar.

Appendix

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Top 35 Staking Chains by Market Cap

| PROJECT | TICKER | MARKET CAP (\$) | YIELD | STAKE RATE |
|-----------|--------|-----------------|-------|------------|
| Ethereum | ETH | 216,024,475,834 | 5.8% | 14.4% |
| Cardano | ADA | 13,226,069,415 | 3.3% | 54.6% |
| Polygon | MATIC | 9,918,650,448 | 4.7% | 37.3% |
| Solana | SOL | 7,919,320,174 | 7.5% | 73.2% |
| Polkadot | DOT | 7,444,748,644 | 15.3% | 47.0% |
| TRON | TRX | 5,918,254,719 | 4.6% | 44.0% |
| Avalanche | AVAX | 5,618,941,328 | 8.5% | 61.1% |
| Cosmos | ATOM | 3,263,560,716 | 21.9% | 66.3% |
| Aptos | APT | 2,002,006,136 | 6.9% | 82.5% |
| NEAR | NEAR | 1,667,792,940 | 11.0% | 45.3% |
| Algorand | ALGO | 1,611,724,274 | 8.0% | 15.2% |
| Stacks | STX | 1,286,978,290 | 8.1% | 17.0% |
| The Graph | GRT | 1,285,711,262 | 10.5% | 24.5% |
| Fantom | FTM | 1,251,480,745 | 6.0% | 44.8% |
| Elrond | EGLD | 1,064,108,292 | 9.7% | 63.8% |
| Tezos | XTZ | 1,025,667,275 | 6.2% | 72.7% |
| Flow | FLOW | 1,013,426,967 | 10.0% | 48.8% |
| Mina | MINA | 664,842,111 | 22.0% | 88.9% |
| Dash | DASH | 633,525,841 | 5.8% | 34.3% |
| Osmosis | OSMO | 443,821,685 | 21.9% | 40.9% |
| Radix | XRD | 420,810,201 | 7.8% | 28.0% |
| Thorchain | RUNE | 420,416,825 | 13.7% | 15.3% |
| Flare | FLR | 419,036,848 | 10.0% | 8.4% |
| Kava | KAVA | 406,568,313 | 23.8% | 15.9% |
| Injective | INJ | 374,979,612 | 16.3% | 58.2% |

Appendix

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Top 35 Staking Chains by Market Cap

| PROJECT | TICKER | MARKET CAP (\$) | YIELD | STAKE RATE |
|----------------|--------|------------------------|--------------|--------------|
| Celo | CELO | 323,967,059 | 6.0% | 48.4% |
| Kusama | KSM | 307,099,046 | 10.8% | 51.0% |
| Decred | DCR | 301,629,802 | 7.1% | 65.6% |
| Oasis | ROSE | 292,835,712 | 8.2% | 44.4% |
| Audius | AUDIO | 274,342,527 | 22.0% | 25.7% |
| Harmony | ONE | 249,487,566 | 8.7% | 45.7% |
| Livepeer | LPT | 187,812,273 | 24.7% | 45.1% |
| Skale | SKL | 166,504,717 | 10.3% | 50.5% |
| Secret | SCRT | 133,562,346 | 24.2% | 60.7% |
| Canto | CANTO | 112,910,143 | 13.4% | 24.5% |
| Total | | 287,677,070,086 | | |
| Average | | 8,219,344,860 | 11.6% | 44.7% |
| Median | | 664,842,111 | 9.7% | 45.3% |

About Staked

Staked is the leading non-custodial staking service provider. Staked offers staking services for 45+ proof-of-stake blockchains with billions of delegated assets. The leading investors, exchanges and wallets trust Staked to reliably and securely deliver the optimal staking rewards. Kraken acquired Staked in December 2021.

For more information about Staked, please visit: <http://staked.us>

To schedule time with a Staked representative, please contact sales@staked.us

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