

Staked



The State of Staking

Q2 | 2021



\$359 BN

(-20% Q/Q)

Market Capitalization

24%

(+20% Q/Q)

PoS Share of Total Market Cap

24

(-2 Q/Q)

PoS Chains in Top 100

7.3%

(-19% Q/Q)

Average Yield (weighted)

\$12.5 BN

(-34% Q/Q)

Annual Staking Rewards Projected in 2021

INTRODUCTION

State of Staking, Q2 2021

“Proof-of-stake (PoS) assets outperformed the overall crypto market, falling only 20% on average quarter-over-quarter. In Q2, stakers earned an additional yield of \$1.21 to \$3.59 on a \$100 initial investment compared to those who simply held an asset.”

The second quarter of 2021 was a reminder of the volatility that still marks the crypto space. After surging to an all-time high in May, Ethereum fell by more than 50% at one point, before rebounding somewhat and stabilizing for the remainder of the quarter at roughly 30% below its peak. Nevertheless, from a medium- to long-term perspective, fundamentals remain strong.

Total value locked (TVL) in decentralized finance (DeFi) projects, for example, is currently more than 30 times greater than at the halfway point of 2020, and nearly four times greater than at the beginning of this year.

Proof-of-stake (PoS) assets outperformed the overall crypto market, falling only 20% on average quarter-over-quarter. Moreover, recent market swings have further highlighted the advantages of staking. In Q2, stakers earned an additional yield of \$1.21 to \$3.59 on a \$100 initial investment compared to those who simply held an asset.

Beyond market movements, Q2 saw continued momentum around important ongoing developments for proof-of-stake and DeFi more generally. Amid growing concern about the energy used to mine on proof-of-work (PoW) chains like

INTRODUCTION (CONTINUED)

Bitcoin, people have gained a new awareness of the environmental benefits of PoS. Ethereum gas fees, which had been a major concern for the network, declined by an average of 80% in Q2, driven by the introduction of Flashbots and the adoption of sidechains such as Polygon.

Finally, the second quarter saw continued interest from Wall Street, as numerous banks produced in-depth research to educate their clients on crypto, DeFi, and staking opportunities. Morgan Stanley, J.P. Morgan, and Dragonfly were among the firms whose research highlighted the disruptive potential of decentralized finance applications.

Q2 2021 Staking Trends

The second quarter witnessed an all-time high for the crypto market in May -- followed by a dramatic correction towards the end of the quarter. In Q2 overall, total market capitalization declined by roughly 30%. Proof-of-stake chains' market cap, however, corrected by only 20% -- outpacing the performance of the wider market by 10% for the quarter.

That Q2 performance does not include income from staking, which showed a 7.3% annualized yield on a market cap-weighted basis, and 12.4% average annualized yield across the top 30 proof-of-stake (PoS) chains.

Staking yields declined by an average of 1.7 percentage points quarter-over-quarter, driven by increased staked ratio leading to dilution of rewards across all stakers.

Top-30 PoS market share increased by 4 percentage points from 20% to 24%, driven by better-than-market performance from several major PoS projects. Solana and Polygon even ended the quarter in the green, fueled by an increased focus on layer-2 and sidechain solutions.

The market cap of Ethereum and Cardano declined modestly -- by roughly 10% -- reflecting strong support for proof-of-stake smart contract platforms by the investment community.

Growth in Q2 was modest compared to Q1. Some assets, such as DOT, in fact suffered significant losses. Still, even in down markets, those that staked fared \$1.21 to \$3.59 better than unstaked counterparts on a \$100 investment.

Staking Returns on Select Top Assets: Power of Compounding

	ETH	DOT	ADA	ATOM	SOL
Total Q2 Return	15.0%	-56.4%	5.1%	45.2%	46.8%
Current Yield	6.8%	14.0%	4.6%	9.9%	7.4%
Extra Staking Yield	2.0%	1.5%	1.2%	3.6%	2.7%
Initial Investment	\$100	\$100	\$100	\$100	\$100
Value of Initial Investment after Q2	\$116.98	\$45.09	\$106.32	\$148.75	\$149.52
Extra \$ Attributable Staking	\$1.96	\$1.52	\$1.21	\$3.59	\$2.72

***Assumptions:** One quarter of staking at the average yield rate. Current Yield is as of 06/30/21. Return is price from 04/01/2021 to 06/30/2021.

Environmental Impact: PoW vs. PoS

Q2's selloff, the first major correction since the bull market began in late 2020, was largely driven by trepidation around the environmental impact of large mining operations. In May, Elon Musk tweeted concerns around Bitcoin's energy consumption.

Bearish sentiment continued to build, as these environmental concerns around PoW led to conversations around ESG, sustainability, and renewable energy.

This proved to be more than just a temporary focus, and real consequences came of it. China took immediate action to ban Bitcoin mining, particularly taking aim at coal-powered energy sources. This seems to have had a real effect on public sentiment: some 49% of respondents to an Investing.com survey said that "Bitcoin being environmentally unfriendly" is an issue for them as an investor. This resulted in a 50% decline in Bitcoin's hashrate, and at one point a roughly 50% decline in the total market cap of all crypto assets.

One important development to emerge from this sudden alarm over environmental impact has been greater awareness of the advantages of proof-of-stake as a security model. As highlighted in a J.P. Morgan report, PoS is a more energy-efficient protocol with which to achieve blockchain validation and consensus than proof-of-work. In PoW, miners are selected based on a race to solve complex mathematical problems. A miner's earnings are proportional to the percent of total hash power -- a network's total computing power -- they own. Thus the competition to own more hash power in turn consumes more and more energy.

In PoS, by contrast, the selection process is largely based on the ratio of tokens staked on the network. This eliminates the need for competitive resource hoarding. As a result, over time it is likely that environmentally conscious investors will see increasing value in proof-of-stake networks.

Lower Gas Prices & Transition to PoS

Average gas fees decreased by 80% in Q2 on the Ethereum network. This was largely a result of the emergence of Flashbots -- an alternative way for arbitrage and liquidation bots to submit transactions to the Ethereum network -- as well as the rapid adoption of Polygon, an Ethereum Virtual Machine (EVM)-compatible sidechain.

According to Our Network, 85% of the ETH1 PoW hashing power is currently participating in Flashbots. And Polygon currently has 20.38% of Ethereum's daily active users (DAU). Polygon's average DAUs increased 25% in June versus May, reaching a sustained 100,000-120,000 DAUs. More impressively, Polygon DAUs increased by approximately 269% in the last 60 days of Q2.

Per Etherscan, the average gas price in Q2 was 87 gwei, down 42% from an average of 150 gwei in Q1. The decrease in gas price accelerated in the quarter, with an average of 27 gwei in June, down 82% from Q1.

With the expected Q3/Q4 release of layer-2 scaling solutions such as Optimism, Arbitrum and a variety of zero-knowledge based solutions, researchers at the Ethereum foundation made the decision to prioritize the transition from PoW to PoS (for the ETH1 chain) over the implementation of sharding (an additional scaling solution). This is expected to accelerate the transition away from PoW to PoS by 6-12 months, with Q4 2021-Q1 2022 the new expected transition timeline.

Wall Street Says Hello to Ethereum

The second quarter of 2021 saw Wall Street institutions go further down the blockchain “rabbit hole” as they expanded their research into cryptocurrencies beyond Bitcoin. In yet another sign of institutional interest in understanding and engaging with crypto assets, several Wall Street banks started propagating ETH-focused research reports to their largely traditional investor client bases.

Morgan Stanley released a crypto market update that touched on the implications of an Ethereum transition to proof-of-stake as well as Ethereum Improvement Proposal 1559 (EIP 1559). And with so much high-profile focus on energy consumption and whether Bitcoin’s proof-of-work consensus model was sustainable, the bank suggested one logical solution for ESG-conscious investors: an asset like ETH, which is currently transitioning to a more energy-efficient proof-of-stake system.

In addition to the energy question, the “ultra-sound money” debate has picked up with the pending implementation of EIP 1559. One impact of the upgrade is that the ETH monetary policy will become deflationary. In a world where central banks are printing money at record levels, the idea of ETH as ultra-sound money is becoming increasingly compelling to traditional asset allocators.

Another research piece that stood out over the last quarter was J.P. Morgan’s widely circulated report on staking. In the report, the firm estimates that staking will grow from a \$9 billion business to a \$40 billion business in 2025 should proof-of-stake grow to become the most ubiquitous consensus mechanism.

WALL ST. SAYS HELLO TO ETHEREUM (CONTINUED)

The report also touched on the fact that staking makes crypto a more attractive asset class to traditional investors, as staking yield lowers the opportunity cost for holding cryptocurrency while also being extremely competitive with the yields available in traditional markets today.

Finally, Dragonfly Research put out a comprehensive guide to understanding ETH as an investment. Central to the report was discussion of the disruptive potential of DeFi to the legacy financial system. The report states:

“Ethereum enable[s] value and ownership to be governed by code, which can serve as an alternative to the existing trading and settlement rails of traditional finance. As the technology improves and transaction cost declines, Ethereum and DeFi will enable new use cases that are unimaginable today.”

About Staked

Staked helps investors earn yield from staking and DeFi without taking custody of their crypto assets. Founded in 2018, the Company runs staking infrastructure for 40+ proof-of-stake blockchains and their RAY token delivers the highest yield in DeFi for ETH and stablecoins. Staked works on behalf of leading crypto funds and offers an API that allows custodians, exchanges and wallets to offer these tools to their customers.

Staked investors include Pantera Capital, Winklevoss Capital, Digital Currency Group, Parafi Capital, Coinbase Ventures, Fabric Ventures, and other leading blockchain investors.

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

**Disclaimer: Staking on some blockchains may entail slashing risk, which can result in loss of principal. Please contact a Staked representative for more details.*

Appendix

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Top 30 Staking Chains by Market Cap

PROJECT	TICKER	MARKET CAP	YIELD	STAKE RATE
Ethereum	ETH	247,907,083,579	6.8%	5.1%
Cardano	ADA	42,200,370,662	4.6%	71.7%
Polkadot	DOT	15,511,453,287	14.0%	62.0%
Solana	SOL	8,758,789,883	7.4%	67.7%
Polygon	MATIC	7,048,983,450	14.9%	35.0%
Tron	TRON	4,674,713,065	3.3%	27.0%
EOS	EOS	3,798,396,264	3.0%	48.3%
Cosmos	ATOM	3,159,158,183	9.9%	70.9%
Algorand	ALGO	2,648,059,352	5.8%	55.8%
Terra	LUNA	2,503,009,196	11.5%	36.2%
Tezos	XTZ	2,370,159,748	5.8%	78.3%
Avalanche	AVAX	1,967,588,637	10.4%	53.2%
Decred	DCR	1,799,196,045	4.2%	57.9%
Kusama	KSM	1,766,946,287	15.4%	48.0%
Thorchain	RUNE	1,756,873,503	26.6%	4.0%
The Graph	GRT	1,646,284,400	10.4%	28.9%
Elrond	EGLD	1,492,914,603	18.8%	64.0%
Dash	DASH	1,425,915,411	6.6%	42.3%
NEAR	NEAR	817,854,247	12.0%	39.0%
Stacks	STX	808,039,122	10.1%	32.7%
QTUM	QTUM	745,389,973	18.3%	5.0%
Horizen	ZEN	725,738,128	8.8%	32.7%
Harmony	ONE	654,219,937	10.6%	40.9%
ICON	ICON	503,031,854	10.8%	63.9%
Livepeer	LPT	466,944,779	30.1%	51.2%
Flow	FLOW	455,808,607	5.1%	90.6%

Appendix

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Top 30 Staking Chains by Market Cap

PROJECT	TICKER	MARKET CAP	YIELD	STAKE RATE
Kava	KAVA	289,659,210	34.2%	58.4%
Mina	MINA	236,696,736	13.0%	89.9%
Skale	SKL	230,924,631	12.8%	43.1%
Audius	AUDIO	171,973,267	26.0%	26.1%
Total		358,542,176,046		
Average		11,951,405,868	12.4%	47.7%

Sources:
<https://www.coingecko.com>, public block explorers and internal Staked data.