WITHDRAWAL OF STAKED ETHER AND RELATED REWARDS EXPECTED IN EARLY APRIL

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Unlocking of Staked Ether Expected to Create a Benchmark Yield for the Digital Assets Industry

Since the <u>Ethereum</u> network underwent a transition in the way it validates transactions from <u>proof-of-work (PoW)</u> to <u>proof-of-stake (PoS)</u> in September 2022, it has been possible for validators to stake Ether (ETH) in a smart contract, but it has not yet been possible to withdraw the staked ETH or earned rewards. A new upgrade to the Ethereum network called the Shanghai Upgrade, or Ethereum Improvement Proposal EIP-4895, is expected to change this in early April 2023.

We believe this upgrade will be significant for the industry, as it creates a yield against which all other token yields can be benchmarked. Although the staking and withdrawal of rewards have been enabled by many other tokens, Ethereum remains the most widely adopted smart contract blockchain and has more than double the number of total developers compared with any other blockchain network. Because Ethereum accounts for 19% of the total crypto market and has a \$204 billion market cap, the asset is fairly liquid and arguably remains one of the favorite assets to own among institutional investors, along with Bitcoin.

Will Unstaking Create Unusual Selling Pressure on ETH?

Currently, the amount of ETH that has been staked on the PoS Beacon chain is more than 16.7 million ETH or more than \$27 billion via over 520,000 validators. This is only approximately 14% of the total ETH in circulation, which is a much lower staking ratio than with many other tokens, where the ratio is more typically 40%–98%. It is estimated that 65% of staked ETH tokens are already liquid, as many validators have issued staked ETH tokens that can be used for decentralized finance (DeFi) applications, etc. The largest ETH validator is a liquid staking pool provider, Lido Finance, with more than 30% market share, followed by centralized exchanges Coinbase, Kraken and Binance. Of centralized exchanges, Coinbase and Binance have offered staked ETH tokens and, hence, liquidity to ETH stakers.

when the <u>Beacon chain</u> came alive in December 2020, an estimated 2 million ETH was staked⁷ on the chain with an average ETH price of \$600,⁸ and these ETH stakers, along with some other early investors, are now in profit. While some of them might be under pressure due to tumultuous crypto price changes last year, significant pricing pressure may not come from this group. These investors are likely to be "true believers" in Ethereum as they took the risk of investing early while not having any firm visibility into when staking rewards could be collected. In addition, we estimate that close to 70% of ETH stakers invested in 2021 and early 2022, and these investors are still underwater. Hence, a majority of these investors may not exit at a loss.

Will Unlocking Create a Situation Where One Validator Could Control >50% of Ethereum Blockchain Transaction Validations?



It may be hard to believe that will be the case, as exiting the Beacon chain will be managed by a staged process. Two types of withdrawals will be possible once the withdrawal of ETH and associated staking rewards is enabled. The first option includes a partial withdrawal, where a validator withdraws the staking reward but leaves the staked ETH untouched. There is an estimated 1 million ETH in accumulated staking rewards of some far, amounting to \$1.7 billion in potential selling pressure at a current ETH price of \$1,656. Because ETH's daily average volume is about \$13 billio 11, it may be unlikely that this will be a major threat to ETH's price, particularly considering that this exit flow is likely to take place over days or weeks.

Another type of withdrawal is a full exit, where an investor exits both the staking reward and the staked ETH deposit. To counteract the potential instability of the network during the exit period, the Ethereum blockchain has imposed limits on these exits. The network is programmed to limit exits to seven validators per epoch, which is 6.4 minutes, and this means that a maximum of 1,575 validators can exit the network per day. As there are more than 520,000 validators in total, the limited number of daily exits may not destabilize the blockchain and/or enable malicious attacks.

With Staking Services under Threat in the U.S., Should They Be Considered Securities?

In February 2023, Kraken was sued by the Securities and Exchange Commission (SEC) for failing to register the offer and sale of its <u>Staking-as-a-Service</u> program as a security in the U.S. Kraken chose to settle this charge, end all of its on-chain staking services for U.S. clients and pay a \$30 million fine. Kraken is the third-largest validator of ETH transactions and has approximately 9% market share of the 16.7 million ETH locked in a smart contract network. Kraken's exit from the U.S. will force investors to find an alternative way to stake ETH, which may benefit liquid staking providers, such as Lido Finance and Rocket Pool.

There appears to be some confusion in the market around how staking products should be viewed, and it could be the case that not all staking products should be viewed in the same way. Some may argue that all "yield," "earn," "annual percentage yield" and "staking" products should probably be treated as securities. According to publicly available information, Kraken's staking program offered an annual fixed yield, paid twice a week, ¹⁴ and this was different from the actual yield and frequency of payment made by the underlying Ethereum protocol.

If all staking programs are viewed as securities, it may harm digital asset market participants like Coinbase, which serves as the second-largest individual ETH validator and derived 11% of its net revenues from staking activities (not just Ether tokens, though) in Q3 2022, according to their public company financial reporting documents. Staking can be a high-margin business; hence, the potential impact on the profitability of digital market participants like Coinbase may be even greater. In fact, digital asset market participants like Coinbase may argue that its staking service should not be viewed as a security because it does not comingle client funds and it pays the same reward as the underlying blockchain minus a transparent fixed fee.

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<sup>1</sup> Source: Electric Capital, Developer Report 2022.
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² Source: CoinMarketCap, 2/17/23.

³ Source: Beaconcha.in, 2/17/23.

⁴ Source: Defi Llama, Stakingrewards.com.

⁵ Source: Nansen.

⁶ Source: Nansen.

⁷ Source: CryptoQuant.

- 8 Source: Bloomberg.
- ⁹ Source: Stakingrewards.com.
- 10 Source: Bloomberg, 2/17/23.
- ¹¹ Bloomberg, 2/17/23.
- 12 Source: Ethereum.org.
- ¹³ Source: Nansen.
- ¹⁴ Source: support.kraken.com.
- ¹⁵ Source: Coinbase, Q3 2022 financials

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DEFINITIONS

Ethereum: A decentralized, open-source blockchain with smart contract functionality. Ether is the native cryptocurrency of the platform.

Proof of Work (PoW): A system that requires a not-insignificant but feasible amount of effort in order to deter frivolous or malicious uses of computing power, such as sending spam emails or launching denial of service attacks.

Proof of Stake (PoS) : The Proof of Stake (PoS) concept states that a person can mine
or validate block transactions according to how many coins they hold

<u>Blockchain</u>: a distributed ledger system in which a record of transactions made in cryptocurrencies are maintained across computers linked in a peer-to-peer network

<u>Cryptocurrency</u>: a digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend.

<u>Market Capitalization</u>: Market cap = share prices x number of shares outstanding. Firms with the highest values receive the highest weights in approaches designed to weight firms by market cap.

<u>Bitcoin (the currency)</u>: A digital currency (also called a cryptocurrency) created in 2009, which is operated by a decentralized authority as opposed to a traditional central bank or monetary authority.

Beacon chain: The Beacon Chain was the name of the original proof-of-stake blockchain that was launched in 2020. It was created to ensure the proof-of-stake consensus logic was sound and sustainable before enabling it on Ethereum Mainnet.

<u>Staking-as-a-Service</u>: A platform that acts as an intermediary, uniting a blockchain's consensus mechanism and cryptocurrency holders who wish to participate in the network.

